

United States Environmental Protection Agency Region 7 300 Minnesota Avenue Kansas City, KS 66101

Date: AFR -4 244

Subject: Transmittal of Sample Analysis Results for ASR #: 6410

Project ID: JG7CR01

Project Description: Big River Nine Tailings - Removal Action sampling

From: Michael F. Davis, Chief

Chemical Analysis and Response Branch, Environmental Services Division

To: Jason Gunter SUPR/SPEB

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition/Sample Release memo for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Data Disposition/Sample Release memo.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

0 TCR 40454441

Superfund

DUDI

2.0

Summary of Project Information

04/04/2014

Project Manager: Jason Gunter **Org:** SUPR/SPEB **Phone:** 913-551-7358

Project ID: JG7CR01

ASR Number: 6410

Project Desc: Big River Mine Tailings - Removal Action sampling

Location: Park Hills State: Missouri Program: Superfund

Site Name: BIG RIVER MINE TAILINGS/ST, JOE MINERALS CORP. Site ID: 07CR Site OU: 01

- RESIDENTIAL ACT/SOURCE CONTROL GPRA PRC: 303DC6

Purpose: Site Cleanup Support

Removal Action support sampling.

Explanation of Codes, Units and Qualifiers used on this report

Sample QC Codes: QC Codes identify the type of Units: Specific units in which results are

sample for quality control purpose. reported.

___ = Field Sample mg/kg = Milligrams per Kilogram

ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank) = Values have been reviewed and found acceptable for use.

J = The identification of the analyte is acceptable; the reported value is an estimate.

U = The analyte was not detected at or above the reporting limit.

ASR Number: 6410 **Sample Information Summary**

Project ID: JG7CR01

Sample	QC Code	Matrix	Location Description	External Sample No	Start	Start	End	End Time	Receipt
No				Sample NO	Date	14:20	Date	ime	Date 03/03/2014
	- 		9232-C1-SF-CP		02/14/2014	14:20 15:15			03/03/2014
			9235-C2-SF-CP 9147-C2-SF-CP		02/14/2014 02/14/2014	16:20			03/03/2014 03/03/2014
		-	9149-C1-SF-CP		02/17/2014	09:43			
	·		9149-C3-SF-CP		02/17/2014	09:49	•		03/03/2014 03/03/2014
			9150-C2-SF-CP		02/17/2014	10:07			03/03/2014
					02/17/2014				03/03/2014
	·		9240-C3-SF-CP		02/17/2014				03/03/2014
			9242-Grdn-SF-CP		02/17/2014				03/03/2014
10 -			9245-DZ-SF-CP		02/17/2014	13:50			03/03/2014
	·	Solid	9246-DW-SF-CP		02/17/2014	14:05			03/03/2014
		Solid	9248-C3-SF-CP		02/20/2014	09:05			03/03/2014
		Solid	9265-C3-SF-CP		02/20/2014	09:22			03/03/2014
			9265-C5-SF-CP		02/20/2014	10:49			03/03/2014
		Solid	9253-Grdn-SF-CP	•	02/20/2014	14:22			03/03/2014
		Solid	9266-C5-SF-CP		02/20/2014	15:14			03/03/2014
		Solid	9252-C1-SF-CP		02/20/2014	16:00			03/03/2014
		Solid	9253-PA-SF-CP		02/20/2014	16:35			03/03/2014
		Solid	9272-C3-SF-CP		02/23/2014	11:45			03/03/2014
		Solid	9273-C4-SF-CP		02/23/2014	12:05			03/03/2014
21 -	•	Solid	9275-C1-SF-CP		02/23/2014	12:50			03/03/2014
22 -		Solid	9276-C1-SF-CP		02/23/2014	13:10			03/03/2014
23 -		Solid	9279-C3-SF-CP		02/23/2014	14:10			03/03/2014
24 -		Solid	9282-C3-SF-CP		02/24/2014	15:45			03/03/2014
25 -	·	Solid	9303-C2-SF-CP		02/24/2014	16:10			03/03/2014
26 -		Solid	9303-LS-SF-CP		02/24/2014	17:10			03/03/2014
27 -	·	Solid	9311-DW-SF-CP		02/25/2014	15:40			03/03/2014
28 -		Solid	9302-C1-SF-CP		02/25/2014	16:10			03/03/2014
29 -		Solid	9287-LS-SF-CP		02/26/2014	14:25			03/03/2014
30 -		Solid	9308-C3-SF-CP		02/26/2014	15:20			03/03/2014
31 -		Solid	9309-C1-SF-CP		02/26/2014	15:55			03/03/2014
101 -		Water	BRMT-9268, Sink - Unpurged		02/18/2014	15:17			03/03/2014
102 -	·	Water	BRMT-9268, Sink - Purged		02/18/2014	15:22			03/03/2014
103 -	·	Water	BRMT-9268, Hydrant - Unpurged		02/18/2014	15:11			03/03/2014
104 -		Water	BRMT-9268, Hydrant - Purged		02/18/2014	15:16			03/03/2014
105 -		Water	BRMT-9267, Sink - Unpurged		02/18/2014	13:55			03/03/2014
106 -		Water	BRMT-9267, Sink - Purged		02/18/2014	14:00			03/03/2014
107 -	·	Water	BRMT-9267, Hydrant - Unpurged		02/18/2014	14:05			03/03/2014
108 -		Water	BRMT-9267, Hydrant - Purged		02/18/2014	14:10			03/03/2014
109 -	_	Water	BRMT-9266, Sink - Unpurged		02/18/2014	12:00			03/03/2014
110 -			BRMT-9266, Sink - Purged		02/18/2014				03/03/2014
111 -			BRMT-9266, Spigot - Unpurged		02/18/2014				03/03/2014
112 -			BRMT-9266, Spigot - Purged		02/18/2014				03/03/2014
113 -	·	Water	BRMT-9238, Sink - Unpurged		02/15/2014	10:12			03/03/2014

Sample Information Summary

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Sample No	•	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
114 -		Water	BRMT-9238, Sink - Purged		02/15/2014	10:17	-		03/03/2014
115 -		Water	BRMT-9238, Spigot - Unpurged		02/15/2014	10:24			03/03/2014
116 -	_	Water	BRMT-9238, Spigot - Purged		02/15/2014	10:29			03/03/2014
117 -		Water	BRMT-9269, Sink - Unpurged		02/19/2014	10:10			03/03/2014
118 -	_	Water	BRMT-9269, Sink - Purged		02/19/2014	10:15			03/03/2014
119 -		Water	BRMT-9269, Hydrant - Unpurged		02/19/2014	10:00			03/03/2014
120 -	_	Water	BRMT-9269, Hydrant - Purged		02/19/2014	10:05			03/03/2014
121 -	_	Water	BRMT-9270, Sink - Unpurged		02/14/2014	10:42			03/03/2014
122 -	_	Water	BRMT-9270, Sink - Purged		02/14/2014	10:47			03/03/2014
123 -	_	Water	BRMT-9270, Spigot - Unpurged		02/14/2014	10:55			03/03/2014
124 -	_	Water	BRMT-9270, Spigot - Purged		02/14/2014	11:00			03/03/2014
125 -	_	Water	BRMT-9271, Sink - Unpurged		02/19/2014	11:15			03/03/2014
126 -	_	Water	BRMT-9271, Sink - Purged		02/19/2014	11:20			03/03/2014
127 -	_	Water	BRMT-9271, Spigot - Unpurged		02/19/2014	11:25			03/03/2014
128 -		Water	BRMT-9271, Spigot - Purged		02/19/2014	11:30			03/03/2014
129 -		Water	BRMT-9272, Sink - Unpurged		02/19/2014	13:30			03/03/2014
130 -		Water	BRMT-9272, Sink - Purged		02/19/2014	13:35			03/03/2014
131 -		Water	BRMT-9273, Sink - Unpurged		02/19/2014	14:10			03/03/2014
132 -	_	Water	BRMT-9273, Sink - Purged		02/19/2014	14:15			03/03/2014
133 -	_	Water	BRMT-9273, Hydrant - Unpurged		02/19/2014	14:25			03/03/2014
134 -	_	Water	BRMT-9273, Hydrant - Purged		02/19/2014	14:30			03/03/2014
135 -	_	Water	BRMT-9285, Sink - Unpurged		02/21/2014	11:15			03/03/2014
136 -	_	Water	BRMT-9285, Sink - Purged		02/21/2014	11:20			03/03/2014
137 -	_	Water	BRMT-9285, Spigot - Unpurged		02/21/2014	11:05			03/03/2014
138 -		Water	BRMT-9285, Spigot - Purged		02/21/2014	11:10			03/03/2014
139 -	_	Water	BRMT-9286, Sink - Unpurged		02/21/2014	11:25			03/03/2014
140 -		Water	BRMT-9286, Sink - Purged		02/21/2014	11:30			03/03/2014
141 -		Water	BRMT-9282, Sink - Unpurged		02/21/2014	09:15			03/03/2014
142 -	_	Water	BRMT-9282, Sink - Purged		02/21/2014	09:20			03/03/2014
143 -	_	Water	BRMT-9282, Spigot - Unpurged		02/21/2014	09:30			03/03/2014
144 -		Water	BRMT-9282, Spigot - Purged		02/21/2014	09:35			03/03/2014
145 -		Water	BRMT-9283, Sink - Purged		02/21/2014	10:05			03/03/2014
146 -	_	Water	BRMT-9283, Sink - Unpurged		02/21/2014	10:00			03/03/2014
147 -	_	Water	BRMT-9284, Hydrant - Unpurged		02/21/2014	10:05			03/03/2014
148 -		Water	BRMT-9284, Hydrant - Purged		02/21/2014	10:10			03/03/2014
149 -	_	Water	BRMT-9299, Spigot - Unpurged		02/21/2014	14:00			03/03/2014
150 -	_	Water	BRMT-9299, Spigot - Purged		02/21/2014	14:05			03/03/2014
151 -	_	Water	BRMT-9301, Sink - Unpurged		02/22/2014	09:55			03/03/2014
152 ~	_	Water	BRMT-9301, Sink - Purged		02/22/2014	10:00			03/03/2014
153 -	_	Water	BRMT-9301, Spigot - Unpurged		02/22/2014	10:10			03/03/2014
154 -	_	Water	BRMT-9301, Spigot - Purged		02/22/2014	10:15			03/03/2014
155 -	_	Water	BRMT-9302, Sink - Unpurged		02/22/2014	10:45			03/03/2014
156 -		Water	BRMT-9302, Sink - Purged		02/22/2014	10:50			03/03/2014
157 -		Water	BRMT-9302, Spigot - Unpurged		02/22/2014	11:02			03/03/2014

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Sample No	-	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
158 -		Water	BRMT-9302, Spigot - Purged		02/22/2014	11:08			03/03/2014
159 -	_	Water	BRMT-9303, Sink - Unpurged		02/22/2014	12:20			03/03/2014
160 -	_	Water	BRMT-9303, Sink - Purged		02/22/2014	12:25			03/03/2014
161 -	_	Water	BRMT-9303, Spigot - Unpurged		02/22/2014	12:35			03/03/2014
162 -	_	Water	BRMT-9303, Spigot - Purged		02/22/2014	12:40			03/03/2014
163 -	_	Water	BRMT-9307, Sink - Unpurged		02/24/2014	10:05			03/03/2014
164 -	_	Water	BRMT-9307, Sink - Purged		02/24/2014	10:10			03/03/2014
165 -	_	Water	BRMT-9307, Spigot - Unpurged		02/24/2014	10:20			03/03/2014
166 -	_	Water	BRMT-9307, Spigot - Purged		02/24/2014	10:27			03/03/2014
167 -	_	Water	BRMT-9310, Spigot - Unpurged		02/24/2014	12:25			03/03/2014
168 -	_	Water	BRMT-9310, Spigot - Purged		02/24/2014	12:30			03/03/2014
169 -	_	Water	BRMT-9311, Sink - Unpurged		02/24/2014	13:30			03/03/2014
170 -	_	Water	BRMT-9311, Sink - Purged		02/24/2014	13:35			03/03/2014
171 -	_	Water	BRMT-9311, Spigot - Unpurged		02/24/2014	13:45			03/03/2014
172 -	_	Water	BRMT-9311, Spigot - Purged		02/24/2014	13:40			03/03/2014
173 -		Water	BRMT-9312, Sink - Unpurged		02/24/2014	14:25			03/03/2014
174 -	_	Water	BRMT-9312, Sink - Purged		02/24/2014	14:30			03/03/2014
175 -		Water	BRMT-9312, Spigot - Unpurged		02/24/2014	14:40			03/03/2014
176 -	_	Water	BRMT-9312, Spigot - Purged		02/24/2014	14:45			03/03/2014
177 -	_	Water	BRMT-9281, Hydrant - Purged		02/19/2014	14:50			03/03/2014

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Project Desc Big River Mine Tailings - Removal Action sampling

Analysis Comments About Results For This Analysis

1 Metals in Solids by ICP-AES

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

3-__ 4-__ 5-__ 6-__ 7-**Samples:** 1-__ 2-__ 8-__ 9-__ 10-__ 11-__ 12-__ 14-__ 13-___ 15-__ 16-__ 17-__ 18-__ 19-__ 20-__ 21-___ 23-__ 24-__ 25-__ 26-__ 27-__ 22-___ 28-__ 30- _ 29-31-__

Comments:

Arsenic was J-coded in sample -27. Slight negative arsenic contamination was found in the calibration blanks. Only samples containing this analyte at a level greater than five times the contamination level of the blank are reported without being qualified. All samples that contained this analyte but at a level less than five times the contamination in the blank have the result J-coded.

Arsenic in samples -10, -25, -27, -28, -29, and -31 was J-coded. This analyte was found in the samples at or above the reporting limits and are an estimate (J-coded) due to negative recoveries of this analyte in the interference check samples (ICS) which was not present in the ICS solution but whose absolute value was greater than the method detection limit (MDL), therefore, a possibility of false negatives exists. The actual reporting limits may be higher than the reported values.

Arsenic, barium, cadmium, chromium, and zinc were J-coded in sample -21. Although the analytes in question have been positively identified in the sample, the quantitations are an estimate (J-coded) due to low recoveries of these analytes (As: 58%, Ba: 60%, Cd: 65%, Cr: 66%, and Zn: 28% vs 75-125%) in the laboratory matrix spike. The actual concentrations for these analytes may be higher than the reported values.

Cadmium in sample -21 was J-coded. Although the analyte in question has been positively identified in this sample, the quantitation is an estimate (J-coded) due to the serial dilution percent difference (Cd: 19%) being above the control limits (15%). The actual concentration for cadmium may be lower than the reported value.

1 Metals in Water by ICP/MS

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Samples: 101-102-103-___ 104-__ 105-__ 106- 107-108-__ 111-___ 112-__ 113-___ 109-___ 110-___ 114-__ 117-___ 118-___ 119-__ 120-___ 121-115-116-125-___ 127-___ 128-__ 123-___ 122-___ 124-___ 126-___ 131-__ 132-___ 133-__ 134-__ 135-129-__ 130-__ 136-__ 137-__ 138-__ 139-___ 140-___ 141-__ 142-__ 143-__ 144-__ 145-__ 146-__ 147-__ 148-__ 149-__

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Project Desc Big River Mine Tailings - Removal Action sampling

Analysis Comments About Results For This Analysis

Samples:	150	151	152	153	154	155	156
	157	158	159	160	161	162	163
	164	165	166	167	168	169	170
	171-	172-	173-	174-	175-	176-	177-

Comments:

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Slight arsenic, barium, cadmium, chromium, lead, and zinc contamination were found in the preparation and/or calibration blanks. Only samples containing these analytes at a level greater than ten times the contamination level of the blank are reported without being qualified. All samples that contained these analytes but at a level less than ten times the contamination in the blank have the result U-coded indicating that the reporting limits have been raised to the levels found in the samples. Samples affected were: arsenic in -159 and -160, barium in -115, -116, -125 through -130, -133, -134, -137 through -140, -147 through -150, -159, and -160, cadmium in -158, chromium in -123 and -137, lead in -103, -104, -115, -129, -133, -139, -144, -146, -149, -153, -155 through -158, -167, and -175, and zinc in -105, -110, -113, -114, -117, -125, -126, -128, -132, -136, -145, -151, -152, -156, and -158 through -160.

Zinc in samples -121 and -141 and barium in sample -161 were J-coded. Although the analytes in question have been positively identified in these samples, the quantitations are an estimate (J-coded) due to the serial dilution percent differences (Zn: 14-24% and Ba: 11%) being above the control limits (10%). The actual concentrations for zinc and barium may be higher than the reported values.

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Analysis/ Analyte	Units	1	2	3	4
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	8.2	5.3	7.8	9.3
Barium	mg/kg	271	189	131	443
Cadmium	mg/kg	2.2	1.4	1.5	2.5
Chromium	mg/kg	22.9	13.2	18.6	17.3
Lead	mg/kg	385	793	389	539
Zinc	mg/kg	145	103	122	259

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RLAB Approved Sample Analysis Results

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Analysis/ Analyte Units 5-___ 6-___ 7-__ 8-___ 1 Metals in Solids by ICP-AES 8.6 7.9 5.1 7.0 Arsenic mg/kg Barium mg/kg 394 154 120 190 Cadmium 2.6 5.2 1.9 mg/kg 2.6 Chromium mg/kg 16.6 17.8 17.3 21.7 Lead mg/kg 516 826 442 467 Zinc 217 376 138 278 mg/kg

Analysis/ Analyte	Units	9	10	11	12
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	4.6	3.3 J	4.9	5.9
Barium	mg/kg	118	84.3	121	361
Cadmium	mg/kg	1.9	4.6	1.5	3.5
Chromium	mg/kg	12.3	11.6	13.8	14.8
Lead	mg/kg	251	713	297	579
Zinc	mg/kg	120	497	220	258

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Analysis/ Analyte	Units	13	14	15	16
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	6.3	5.9	6.0	4.6
Barium	mg/kg	301	117	258	78.8
Cadmium	mg/kg	1.7	1.5	2.6	1.5
Chromium	mg/kg	15.1	19.0	14.1	12.6
Lead	mg/kg	756	283	413	462
Zinc	mg/kg	142	82.6	196	121

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20
5.7
105
13.8
13.5
2080
702

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Analysis/ Analyte	Units	21	22	23	24
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	12.3 J	10.3	10.9	11.1
Barium	mg/kg	345 J	422	185	729
Cadmium	mg/kg	2.8 J	4.2	10.2	4.6
Chromium	mg/kg	28.2 J	24.1	14.9	16.6
Lead	mg/kg	610	1640	1040	1210
Zinc	mg/kg	328 J	707	603	287

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Analysis/ Analyte	Units	25	26	27	28
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	7.7 3	9.4	1.0 J	6.3 J
Barium	mg/kg	132	176	39.5	128
Cadmium	mg/kg	3.0	1.4	2.8	2.3
Chromium	mg/kg	16.7	18.7	5.8	18.6
Lead	mg/kg	542	289	465	1140
Zinc	ma/ka	205	127	181	163

Analysis/ Analyte	Units	29	30	31	101
1 Metals in Solids by ICP-AES					
Arsenic	mg/kg	6.0 J	11.8	4.6 J	
Barium	mg/kg	126	132	269	
Cadmium	mg/kg	5.2	10.8	2.8	
Chromium	mg/kg	16.9	18.6	14.8	
Lead	mg/kg	883	1360	501	
Zinc	mg/kg	344	597	221	
1 Metals in Water by ICP/MS					
Arsenic	ug/L				1.0 U
Barium	ug/L				54.8
Cadmium	ug/L				1.0 U
Chromium	ug/L				2.0 U
Lead	ug/L				1.0 U
Zinc	ug/L				7.1

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Analysis/ Analyte	Units	102	103	104	105
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	51.1	41.4	49.3	10.0 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 ∪	2.0 U
Lead	ug/L	1.0 U	1.1 U	1.8 U	1.0 U
Zinc	ug/L	5.6	106	46.0	2.3 U

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Analysis/ Analyte	Units	106	107	108	109
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	10.0 U	69.7	61.5	45.2
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	ug/L	2.0 U	93.6	35.5	10.1

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Analysis/ Analyte	Units	110	111	112	113
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 ∪	1.0 U	1.0 U
Barium	ug/L	42.7	45.3	44.3	10.0 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Zinc	ug/L	3.5 U	17.9	17.5	3.6 U

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Analysis/ Analyte	Units	114	115	116	117
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	10.0 U	16.5 U	15.2 U	74.5
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	ug/L	4.6 U	58.2	53.3	2.9 U

04/04/2014

Analysis/ Analyte	Units	118	119	120	121
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	60.0	60.0	57.8	45.3
Cadmium	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	ug/L	2.0 U	30.9	16.3	25.7 J

04/04/2014

Project ID: JG7CR01 Project Desc: Big River Mine Tailings - Removal Action sampling

Analysis/ Analyte	Units	122	123	124	125
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	45.2	42.8	41.9	27.4 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Chromium	ug/L	2.0 U	2.5 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	51.9	1.0 U	1.0 U
Zinc	ug/L	15.5	17400	637	9.9 U

04/04/2014

Analysis/ Analyte	Units	126	127	128	129
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	25.9 U	25.8 U	25.6 U	25.7 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	5.8	1.0 U	1.1 U
Zinc	ug/L	9.1 U	411	13.0 U	142

04/04/2014

Project ID: JG7CR01 Project Desc: Big River Mine Tailings - Removal Action sampling

Units	130	131	132	133
ug/L	1.0 U	1.0 U	1.0 U	1.0 U
ug/L	25.7 U	10.0 U	10.0 U	25.8 U
ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
ug/L	2.0 U	2.0 U	2.0 U	2.0 U
ug/L	1.0 U	4.2	1.0 U	1.1 U
ug/L	42.6	78.2	9.3 U	90.4
	ug/L ug/L ug/L ug/L ug/L	ug/L 1.0 U ug/L 25.7 U ug/L 1.0 U ug/L 2.0 U ug/L 1.0 U	ug/L 1.0 U 1.0 U ug/L 25.7 U 10.0 U ug/L 1.0 U 1.0 U ug/L 2.0 U 2.0 U ug/L 1.0 U 4.2	ug/L 1.0 U 1.0 U 1.0 U 1.0 U ug/L 25.7 U 10.0 U 1.0 U ug/L 1.0 U 1.0 U 1.0 U ug/L 2.0 U 2.0 U 2.0 U ug/L 1.0 U 4.2 1.0 U

04/04/2014

Analysis/ Analyte	Units	134	135	136	137
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	29.4 U	10.0 U	10.0 U	29.2 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.3 U
Lead	ug/L	13.2	1.0 U	1.0 ∪	14.9
Zinc	ug/L	39.3	46.5	7.4 U	1760

ASR Number: 6410 RLAB Approved Sample Analysis Results

Project ID: JG7CR01

Project Desc: Big River Mine Tailings - Removal Action sampling

04/04/2014

Analysis/ Analyte	Units	138	139	140	141
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	27.0 U	30.1 U	29.9 U	92.9
Cadmium	ug/L	1.0 U	1.0 U	1.0 ∪	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.3 U	1.0 U	1.0 U
Zinc	ug/L	80.1	294	54.0	18.8 J

ASR Number: 6410 RLAB Approved Sample Analysis Results

Project ID: JG7CR01

Project Desc: Big River Mine Tailings - Removal Action sampling

04/04/2014

Analysis/ Analyte	Units	142	143	144	145
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	98.8	92.3	87.8	10.0 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 ∪	2.0 U
Lead	ug/L	1.0 U	108	3.1 U	1.0 U
Zinc	ug/L	16.7	194	28.5	7.2 U

04/04/2014

Analysis/ Analyte	Units	146	147	148	149
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	10.0 U	20.4 U	21.2 U	18.4 U
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.8 U	1.0 U	1.0 U	3.0 U
Zinc	ug/L	154	34.6	28.2	136

ASR Number: 6410

RLAB Approved Sample Analysis Results

04/04/2014

Project ID: JG7CR01

Analysis/ Analyte	Units	150	151	152	153
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	18.2 U	10.0 U	10.0 U	57.6
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 U	4.9 U
Zinc	ug/L	21.7	5.8 U	3.3 U	809

ASR Number: 6410

RLAB Approved Sample Analysis Results

04/04/2014

Project ID: JG7CR01

Analysis/ Analyte	Units	154	155	156	157
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 ∪	1.0 U	1.0 U	1.0 U
Barium	ug/L	59.9	94.7	93.0	93.0
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 ∪	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.6 U	1.0 U	3.2 U
Zinc	ug/L	39.1	16.7	6.9 U	38.2

04/04/2014

Analysis/ Analyte	Units	158	159	160	161
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	2.0 U	1.7 U	6.5
Barium	ug/L	96.5	28.3 U	27.5 U	28.5 J
Cadmium	ug/L	1.9 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	2.8 U	1.0 U	1.0 U	2.9
Zinc	ug/L	14.4 U	8.8 U	7.4 U	21.8

04/04/2014

Analysis/ Analyte	Units	162	163	164	165
1 Metals in Water by ICP/MS					
Arsenic	ug/L	3.4	1.0 U	1.0 U	1.0 U
Barium	ug/L	27.0	44.3	41.4	39.6
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.0 U	1.0 U	3.1
Zinc	ug/L	12.6	28.1	9.9	28.6

ASR Number: 6410 RLAB Approved San

Project ID: JG7CR01

RLAB Approved Sample Analysis Results

Project Desc: Big River Mine Tailings - Removal Action sampling

04/04/2014

Analysis/ Analyte	Units	166	167	168	169
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	40.7	38.7	40.9	26.7
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.4 U	1.0 U	1.0 U
Zinc	ug/L	13.6	45.2	28.1	13.7

ASR Number: 6410 RLAB Approved Sample Analysis Results

Project ID: JG7CR01

04/04/2014

Analysis/ Analyte	Units	170	171	172	173
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	27.1	29.2	27.5	35.0
Cadmium	ug/L	1.0 ป	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	18.5	1.0 U	2.4
Zinc	ug/L	10.0	764	24.7	26.5

04/04/2014

Analysis/ Analyte	Units	174	175	176	177
1 Metals in Water by ICP/MS					
Arsenic	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Barium	ug/L	33.8	35.3	32.6	27.7
Cadmium	ug/L	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Lead	ug/L	1.0 U	1.9 U	1.0 U	1.0 U
Zinc	ug/L	5.0	41.1	5.3	26.5

CHAIN OF CUSTODY RECORD ENVIRONMENTAL PROTECTION AGENCY REGION VII

14 FEB 14 thru (26 FEB 14

ACTIV	ITY LEADER(P 2504 GUV	OF SURV	VEY OR ACTIVITY Action at	¥ _ <i>Ua</i>	_				DATE OF COLLECTION SHEET DAY MONTH YEAR / 01 5					
_	ENTS OF SHIP			BR	MT-	OUL Sin	te.		-			DAY MONTH YEAR 1 01 5		
	SAMPLE	LUND		E OF CONTAIN				AMP	LED			RECEIVING LABORATORY		
	NUMBER	LUBITAINER NUME		BOTTLE TAINERS PER SA	BOTTLE		water	Soil	sediment	dust	other	REMARKS.OTHER INFORMATION (condition of samples upon receipt other sample numbers etc.)		
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	-107	l					X							
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4		S): OTHER				COURIE SAMPLE		ONV	EYE	D		(SHIPPING DOCUMENT NUMBER)		
PERS	ONNEL CUSTO	DY RECORD	, <u>, , , , , , , , , , , , , , , , , , </u>											
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SEA	LED	UNSEAL	ED		<u></u>	SEALED		UN	ISE/	ALE	D			

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII (26 FEB 14)

ACTIVITY LEADER(Print) NAME OF SURVEY OR ACTIVITY Lemoval at the BRANT-0								DATE OF COLI	ECTION		HEET			
Jason Gunter Removal at the BRA									u1	DAY M	ONTH YEAR	2	of	5
CONTENTS OF SHIP	MENT		574	2		_								
SAMPLE	1 HN/0-	TYP	E OF CONTAIN	ERS	VOA CCT				EDIA othe	RECEIVING LABORATORY OF REMARKS OTHER INFORMATION				
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CHAIN OF CUSTODY RECORD 14 FEB 14 thru ENVIRONMENTAL PROTECTION AGENCY REGION VII 28 FEB 14

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CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII 26 FEB 14

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_	ENTS OF SHIP			I GM	te	27 742 1)	10.			<u>u :</u>	<u>- L</u>	DAY	MONTH	YEAR	17_	10.1	5
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CHAIN OF CUSTODY RECORD ENVIRONMENTAL PROTECTION AGENCY REGION VII (26 FEB 14

ACTIVITY LEADER(P		NAME OF SURVEY OR ACTIVITY REMOVAL at the BRAT-OUL							DATE OF COLLECTION SHEET	
Jason Gun	ACTIVITY LEADER(Print) Jason Gunter				the B	RM	17-0	<u> OU</u>	<u>'1</u>	DAY MONTH YEAR 5 of 5
CONTENTS OF SHIP			Site						_	
SAMPLE		TYPE OF	CONTAINERS		VOA SET	SA	MPLE		OIA	RECEIVING LABORATORY REMARKS/OTHER INFORMATION
NUMBER	CUBITAINER	BOTTLE B		OTTLE	(2 VIALS EA)	₩ater	soil sediment	dust	"	(condition of samples upon receipt, other sample numbers, etc.)
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V -23				•			X	_	<u> </u>	
6410-24						\vdash	X	1		
-25		 				 	<u>X</u>	\perp	<u> </u>	
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DESCRIPTION OF SH	HPMENT			М	ODE OF SHI	PME	VΤ			2/28/14
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ice chest	-	COURIE								
		SAMPLI	R CO	NVEY	ED.		(SHIPPING DOCUMENT NUMBER)			
PERSONNEL CUSTO	RECE	VED BY					REASON FOR CHANGE OF CUSTODY			
Markel Shares					DWis	a a	~	_		Recident lab
TELINQUISHED BY DATE TIME					VED BY	ن ر	INSE	ALE	D P	REASON FOR CHANGE OF CUSTODY
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SEALED	UNSEAL				LED		JNSE	ALE	ED [
RELINQUISHED BY		DATE	TIME	RECE	IVED BY					REASON FOR CHANGE OF CUSTODY
L	LINGFAL			- SEA	LED		UNSI	FAL	EDF	4

ASR Number:	6410 Sample Number:	1 QC Cod	de: Matr	ix: Solid Ta	g ID: 6410-1
Project ID:	JG7CR01	Pro	ject Manager:	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal Action	sampling		
City:	Park Hills		State	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		ERALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	9232-C1-5F-	CP			
		External Samp	ole Number:		
Expected Conc	: (or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:		_:_
Longitude:			End:	3714174	14:20
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Comm	ents:				

(N/A)

XRF #1535

Average XRF-Pb: 358 ppm

ASR Number:	Sample Number:	2 QC Cod	le: Matr	ix: Solid Tag	ID: 6410-2
Project ID:		'-	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings - R	Removal Action	sampling		
City:	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC		RALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	9235-C2-SF-C	P			
	E	external Samp	le Number: _		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Colle	ection: Start:	_/_/	:
Longitude:			End:	2/14/14	15:15
Laboratory An	alyses:			<u> </u>	
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Comme	ents:				

XRF #1535

Average XRF-Pb: 335 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number	er: 3 QC Co	ode: Mati	rix: Solid Tag	ID: 6410-3
Project ID:	JG7CR01	Pr	oject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings	- Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOL		IERALS CORP	Site ID: 07Cf	R Site OU: 01
Location Desc:	9147-C2-SF-	P			
		External Sam	ple Number:		
Expected Conc	: (or Circle Or	ie: Low Mediur	n High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:		:
Longitude:			End:	क्तातात्त	16:20
Laboratory Ar	nalyses:			··· <u> </u>	
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	ds by ICP-AES	
Sample Comm	ents:				
(N/A)					

XRF #1535

Average XRF-Pb: 404 ppm

ASR Number:	6410 Sample Numb	er: 4	QC Co	de: Mat	rix: Solid T	ag ID: 6410-4
Project ID:		Domesial		ject Manager	: Jason Gunte	r
-	Big River Mine Tailings	s - Removai	Action		. Missauri	
Program:	Park Hills			State	: Missouri	
_	BIG RIVER MINE TAILI RESIDENTIAL ACT/SOL			RALS CORP	Site ID: 07	CR Site OU: 01
Location Desc:	9149-C1-56	=•cP				
		Externa	l Samp	le Number:		
Expected Conc	(or Circle O	ne: Low N	1edium	High)	Date	Time(24 hr)
Latitude:		Samp	le Coll	ection: Start:	//	_:_
Longitude:				End:	2/14/14	<u>09:43</u>
Laboratory An	alyses:	·············				
Container	Preservative	Holding	Time	Analysis		
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Soli	ds by ICP-AES	
Sample Commo	ents:	~ **		<u> </u>		
(N/A)						

XRF #1535

Average XRF-Pb: 5733 ppm

ASR Number:	6410 Sample Number:	5 QC (Code: Mat	rix: Solid Ta	g ID: 6410-5
Project ID:	JG7CR01	ŗ	Project Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal Acti	on sampling		
	Park Hills			: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		INERALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	9/49-C3-5F-	cP			
		External Sa	mple Number:		
Expected Conc	(or Circle One:	Low Medic	ım High)	Date	Time(24 hr)
Latitude:		Sample C	ollection: Start:	_/_/_	_:_
Longitude:			End:	2/17/14	<u>09:49</u>
Laboratory Ar	nalyses:				
Container	Preservative	Holding Time	e Analysis		
1 - 8 oz glass	4 Deg C	180 Day	s 1 Metals in Soli	ds by ICP-AES	
Sample Comm	ents:		····		
(N/A)					

XRF #1535

Average XRF-Pb: 502 ppm

ASR Number:	6410 Sample Number:	6 QC Co	de: Matr	ix: Solid	Tag ID: 6410-6
Project ID:	JG7CR01	Pro	ject Manager:	Jason Gun	iter
Project Desc:	Big River Mine Tailings - I	Removal Action	sampling		
City:	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		ERALS CORP	Site ID:	07CR Site OU: 01
Location Desc:	9150-C2-5F-	CP			
		External Samp	ole Number: _		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:	/_/	_;
Longitude:			End:	2/17//	<u> 10 : 07</u>
Laboratory An	alyses:	***************************************			
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Comm	ents:				

XRF #1535

Average XRF-Pb: 787 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	7 QC Cod	le: Matr	ix: Solid Tag	ID: 6410-7
Project ID:		•	ject Manager:	Jason Gunter	
-	Big River Mine Tailings - R	removal Action	· -		
•	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC		RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	9238-C1-5F	·cP			
	E	external Samp	le Number: _		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Colle	ection: Start:	_/_/_	:
Longitude:			End:	1/17/14	<u>/c : /2</u>
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Comme	ents:				

XRF #1535

Average XRF-Pb: 426 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	8 Q	C Cod	e: Ma	trix: Solid	Tag 1	ID: 6410-8
Project ID:	JG7CR01	· ·	Pro	ject Manage	r: Jason Gu	nter	
Project Desc:	Big River Mine Tailings - F	Removal A	Action :	sampling			
City:	Park Hills			Stat	e: Missouri		
Program:	Superfund						
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID:	07CR	Site OU: 01
Location Desc:	9240-C3-5F-CP						
	ı	External	Samp	le Number:			
Expected Conc	(or Circle One:	Low Me	edium	High)	Date		Time(24 hr)
Latitude:		Sample	e Colle	ction: Start	://_	_	_:_
Longitude:				End	: <u>Z/17</u> /_	<u> 4</u>	<u>//:26</u>
Laboratory An	alyses:						
Container	Preservative	Holding T	ïme	Analysis			
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in So	lids by ICP-AES	;	
Sample Comme	ents:				· · · · · · · · · · · · · · · · · · ·		

XRF #1535

Average XRF-Pb: 5-05 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number	9 QC Co	de: Matr	ix: Solid Tag	ID: 6410-9
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings -		ject Manager: sampling	Jason Gunter	
-	Park Hills		State:	Missouri	
_	Superfund BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•	ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	9242 - Grdn-	SF-CP			
		External Samp	ole Number: _	·	
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:	//	: <u></u>
Longitude:			End:	2/17/14	12:18
Laboratory Ar	nalyses:			-	
Container	Preservative	Holding Time			
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Comm	ents:				
(N/A)					

XRF #1535

Average XRF-Pb: 245 ppm

ASR Number:	6410 S	ample Number:	: 10	QC Cod	de: Ma	atrix: Solid	Tag :	ID: 6410-10
•	Big Rive Park Hill	r Mine Tailings - I s	Remova			er: Jason Gu te: Missouri	ınter	
_	BIG RIV	ER MINE TAILING NTIAL ACT/SOUR			RALS CORP.	- Site ID:	07CR	Site OU: 01
Location Desc:	92	145-DZ-5F.	-cP					
			Externa	al Samp	le Number:			
Expected Conc	:	(or Circle One:	Low I	Medium	High)	Date		Time(24 hr)
Latitude:			Samp	ole Colle	ection: Star	t:/_/_	_	:
Longitude:					End	d: <u>4</u> / <u>/7</u> /_	<u> 4</u>	13:50
Laboratory An	-							
Container 1 - 8 oz glass		servative eg C			Analysis 1 Metals in Se	olids by ICP-AE	S	
Sample Comme	ents:							
(N/A)								

XRF #1535

Average XRF-Pb: 409 ppm

ASR Number:	6410 Sample Number	: 11	QC Co	de: Matr	ix: Solid Ta	ig ID: 6410-11
Project ID:	JG7CR01	· · · · · ·	Pro	ject Manager:	: Jason Gunter	-
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			ERALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	9246-16-5	(()	0			
		Extern	al Samp	ole Number: _		
Expected Conc	(or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:		
Longitude:				End:	2/17/14	14:05
Laboratory An	alyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	ls by ICP-AES	
Sample Commo	ents:				· · · · · · · · · · · · · · · · · · ·	
(N/A)						

XRF #1535

Average XRF-Pb: 409 ppm

ASR Number:	6410 Sample Number:	12	QC Cod	e: Matı	ix: Solid	Tag 1	D: 6410-12
Project ID:	JG7CR01		Proj	ject Manager	: Jason Gu	nter	
Project Desc:	Big River Mine Tailings - I	Removal	Action :	sampling			
City:	Park Hills			State	: Missouri		
Program:	Superfund						
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID:	07CR	Site OU: 01
Location Desc:	9248-C3-5	F-CX)				
		Externa	l Samp	le Number:			
Expected Conc	(or Circle One:	Low M	1edium	High)	Date		Time(24 hr)
Latitude:		Samp	le Colle	ection: Start:			_:_
Longitude:				End:	2 120/1	4	09:05
Laboratory An	alyses:	-					
Container	Preservative	Holding	Time	Analysis			
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	ds by ICP-AES	5	
Sample Commo	ents:						

XRF #1535

Average XRF-Pb: 627 ppm

Sample Collected By: DG/TT

ASR Number: 6	5410 Sample Number:	13	QC Co	de: Mat	rix: Solid	Tag I	D: 6410-13
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings - F	Remova		oject Managei sampling	: Jason Gu	nter	
-	Park Hills			State	: Missouri		
Program:	•						
Site Name:	BIG RIVER MINE TAILING: RESIDENTIAL ACT/SOURCE	•		ERALS CORP	Site ID:	07CR	Site OU: 01
Location Desc:	9265-C3-5F-C	P					
		Extern	al Samp	ole Number:			
Expected Conc	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//_	_	_:_
Longitude:				End:	<u> </u>	4	<u>07</u> : <u>4</u> 2
Laboratory An	alyses:						
Container	Preservative	Holdin	g Time	Analysis			
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Soli	ds by ICP-AES		
Sample Comme	ents:						
(N/A)							

XRF #1535

Average XRF-Pb: 837 ppm

ASR Number:	6410	Sample Number:	14	QC Cod	de: Mai	trix: Solid	Tag :	ID: 6410-14			
Project ID:	JG7CR	01	 	Pro	ject Manage	r: Jason Gu	ınter				
Project Desc:	Big Riv	ver Mine Tailings - F	Remov	al Action	sampling						
City:	Park H	ills			State	e: Missouri					
Program:	Superf	und									
Site Name:		VER MINE TAILING: ENTIAL ACT/SOURC	-		RALS CORP	Site ID:	07CR	Site OU: 01			
Location Desc:		7265-05-51	E-CF)							
		1	Extern	al Samp	le Number:						
Expected Conc	2.2	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)			
Latitude:			Sam	ple Coll	ection: Start	://_	_	:			
Longitude:					End	: <u>2/2</u> /_	A	<u>10:49</u>			
Laboratory An	nalyses	:									
Container	P	reservative	Holdin	ng Time	Analysis						
1 - 8 oz glass	4	Deg C	180	Days	1 Metals in Sol	ids by ICP-AE	5				
Sample Commo	ents:										

XRF #1535

Average XRF-Pb: 345 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	15	QC Cod	le: Mati	rix: Solid	Tag I	ID: 6410-15
City:	Big River Mine Tailings - R Park Hills	Removal			: Jason Gu : Missouri	nter	
Program: Site Name:	Superfund BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC			RALS CORP	Site ID:	07CR	Site OU: 01
Location Desc:	9253-GRDN-S	F-CF) 				
	E	Externa	l Samp	le Number:			
Expected Conc	(or Circle One:	Low I	Medium	High)	Date		Time(24 hr)
Latitude:		Samp	le Colle	ection: Start:	_/_/_		_:_
Longitude:				End:	<u> </u>	<u>r4</u>	1 <u>4</u> :22
Laboratory An	alyses:						
Container 1 - 8 oz glass	Preservative 4 Deg C		Time Days	Analysis 1 Metals in Solid	ds by ICP-AES	5	
Sample Commo	ents:						
(N/A)							

XRF #1535

Average XRF-Pb: 356 ppm

ASR Number:	6410 Sample Number	: 16	QC Co	de: Matı	ix: Solid	Tag ID: 6410-16
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings -	Remov		ject Manager: sampling	: Jason Gunt	er
-	Park Hills				Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	-		ERALS CORP	Site ID: 0	7CR Site OU: 01
Location Desc:	9266-C5-5F-C	<u></u>				
		Extern	nal Samp	ole Number:		
Expected Conc	: (or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	iple Coll	ection: Start:	_/_/	:
Longitude:				End:	2/24/14	<u>(57:14</u>
Laboratory An	ialyses:				·	
Container	Preservative	Holdir	ng Time	Analysis		
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	ls by ICP-AES	
Sample Comm	ents:				···	
(N/A)						

XRF #1535

Average XRF-Pb: 504 ppm

ASR Number:	6410 Sample Number:	17 QC Coc	le: Matr	ix: Solid Ta	g ID : 6410-17
Project ID:		· ·	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings - R	Removal Action	sampling		
City:	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC		RALS CORP	Site ID: 070	R Site OU: 01
Location Desc:	92.52-C1-5FC	P			
	E	xternal Samp	le Number: _		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Colle	ection: Start:	//	:
Longitude:			End:	<u> 4 /20/14</u>	<u>/6:00</u>
Laboratory An	alyses:			· · · · · · · · · · · · · · · · · · ·	
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES	
Sample Commo	ents:				

XRF #1535

Average XRF-Pb: 319 ppm

Sample Collected By: DG/TT

ASR Number:	Sample Number:	18 QC C	ode: Mat	rix: Solid	Tag ID: 6410-18
Project ID:			roject Managei	r: Jason Gun	ter
_	Big River Mine Tailings - R	Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC	•	NERALS CORP	Site ID: ()7CR Site OU: 01
Location Desc:	9253-PA-SF-CI	ρ			
	E	external San	nple Number:		
Expected Conc	(or Circle One:	Low Mediu	m High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:		_:_
Longitude:			End:	2/20/14	16:35
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Soli	ds by ICP-AES	
Sample Comme	ents:				

(N/A)

XRF #1535

Average XRF-Pb: 215 ppm

ASR Number:	6410 Sample Number:	: 19	QC Co	de: Matı	rix: Solid 1	ag ID : 6410-19
Project ID:		_		ject Manager	: Jason Gunte	er
-	Big River Mine Tailings - I	Remova	Il Action			
-	Park Hills			State	: Missouri	
Program:	•					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			ERALS CORP	Site ID: 0	7CR Site OU: 01
Location Desc:	9272-C3-5F-C	P			<u></u> _	
		Extern	al Samp	ole Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	:
Longitude:				End:	2/23/14	11:45
Laboratory An	alyses:			·····		
Container	Preservative	Holdin	g Time	Analysis		
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	ls by ICP-AES	
Sample Comme	ents:					
(N/A)						

XRF #1535

Average XRF-Pb: 851 ppm

ASR Number:	S410 Sample Number:	20	QC Cod	le: Matı	rix: Solid	Tag I	D: 6410-20		
Project ID:				ject Manager	: Jason Gu	nter			
-	Big River Mine Tailings - F Park Hills	(emova	Action	• =	: Missouri				
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID:	07CR	Site OU: 01		
Location Desc:	9273-C4-5F-C1	0							
	ı	Externa	al Samp	le Number:					
Expected Conc	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)		
Latitude:		Samı	ple Colle	ection: Start:	//_	_	_:_		
Longitude:				End:	2/23/(ત્	12:05		
Laboratory An	alyses:			, Hg					
Container	Preservative	Holding	g Time	Analysis					
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	is by ICP-AES	;			
Sample Comme	ents:								

XRF #1535

Average XRF-Pb: 2008 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sam	ple Number:	21	QC Cod	le: M	1atrix	: Solid Tag	ID: 6410-21			
Project ID: Project Desc:		Project Manager: Jason Gunter River Mine Tailings - Removal Action sampling									
-	Park Hills				Sta	ate: M	lissouri				
Program: Site Name:	BIG RIVER N	INE TAILINGS L ACT/SOURCI			RALS CORP	P S	Site ID: 07CF	Site OU: 01			
Location Desc:	9275	CI-SF-CH)								
		E	xterna	ıl Samp	le Numbei	r:					
Expected Conc	: (0	or Circle One:	Low I	Medium	High)		Date	Time(24 hr)			
Latitude:		<u> </u>	Samp	le Colle	ection: Sta	rt: _	_/_/_	_:_			
Longitude:		_			Eı	nd: _	2 1231 (4	<u> [4:50</u>			
Laboratory Ar	-							*			
Container 1 - 8 oz glass	Preserv 4 Deg C	ative	_	Time Days	Analysis 1 Metals in	Solids b	y ICP-AES				
Sample Comm	ents:										
(N/A)											

XRF #1535

Average XRF-Pb: 5/8 ppm

ASR Number:	6410 Sample Numbe	r: 22 Q	C Code:	Matr	ix: Solid 1	ag ID: 6410-22
Project ID:	JG7CR01		Project Ma	nager:	Jason Gunto	 er
Project Desc:	Big River Mine Tailings -	- Removal A	ction samplin	g		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILIN RESIDENTIAL ACT/SOUR	•		ORP	Site ID: 0	7CR Site OU: 01
Location Desc:	9276-C1-51	=cP				
		External	Sample Num	ber: _		
Expected Conc	(or Circle One	e: Low Me	dium High)		Date	Time(24 hr)
Latitude:		Sample	Collection:	Start:	//	_:
Longitude:				End:	2/23/14	<u> (3 : 10</u>
Laboratory An	alyses:					
Container	Preservative	Holding T	ime Analys	is		
1 - 8 oz glass	4 Deg C	180 [Days 1 Metals	s in Solid	s by ICP-AES	
Sample Commo	ents:					
(N/A)						

XRF #1535

Average XRF-Pb: //04 ppm

ASR Number:	6410 Sample Number:	23	QC Cod	le: Matı	rix: Solid	Tag ID: 6410-23			
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gun	ter			
Project Desc:	Big River Mine Tailings - I	Removal	Action	sampling					
City:	Park Hills	k Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: (97CR Site OU: 01			
Location Desc:	9279-C3-5F-C1	ρ							
	ı	Externa	i Samp	le Number:					
Expected Conc	(or Circle One:	Low N	1edium	High)	Date	Time(24 hr)			
Latitude:		Samp	le Colle	ection: Start:	//	;			
Longitude:				End:	L/33/19	1 <u>12:10</u>			
Laboratory An	alyses:					······································			
Container	Preservative	Holding	Time	Analysis					
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	is by ICP-AES				
Sample Commo	ents:				·				
(N/A)									

XRF #1535

Average XRF-Pb: 798 ppm

ASR Number:	Sample Number:	24 QC Cod	le: Matr	ix: Solid Tag	ID: 6410-24				
Project ID:			ject Manager:	Jason Gunter					
Project Desc:	Big River Mine Tailings - R	Removal Action	sampling						
City:	Park Hills	Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC		RALS CORP	Site ID: 07C	R Site OU: 01				
Location Desc:	9282-C3R5F	-cp							
	E	External Samp	le Number:						
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)				
Latitude:		Sample Coll	ection: Start:	_/_/_	:				
Longitude:			End:	2/24/14	15:45				
Laboratory An	alyses:	<u> </u>	· · · · · · · · · · · · · · · · · · ·	-, •, · · · · · · · · · · · · · · · · · ·					
Container	Preservative	Holding Time	Analysis						
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	s by ICP-AES					
Sample Comme	ents:		 						

XRF #1535

Average XRF-Pb: 794 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number	: 25 QC C	ode: Mati	rix: Solid Tag	ID: 6410-25				
Project ID:	JG7CR01	Р	roject Manager	: Jason Gunter					
Project Desc:	Big River Mine Tailings -	Removal Actio	n sampling						
City:	Park Hills	k Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•	NERALS CORP	Site ID: 07CF	R Site OU: 01				
Location Desc:	9303-C2-5F-C	p							
		External San	nple Number:	····					
Expected Conc	: (or Circle One:	Low Mediu	m High)	Date	Time(24 hr)				
Latitude:		Sample Co	ollection: Start:		_:_				
Longitude:			End:	2/34/14	16:10				
Laboratory An	alyses:								
Container	Preservative	Holding Time	Analysis						
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	ds by ICP-AES					
Sample Commo	ents:								
(N/A)									

XRF #1535

Average XRF-Pb: 5-42 ppm

ASR Number:	6410 Sample Number:	26	QC Co	de: Ma	itrix: Solid	Tag I	D: 6410-26		
Project ID:	JG7CR01		Pro	ject Manage	er: Jason Gur	iter			
Project Desc:	Big River Mine Tailings - F	Remov	al Action	sampling					
City:	Park Hills	ark Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			RALS CORP.	- Site ID:	07CR	Site OU: 01		
Location Desc:	9303-LS-5F-C1	۵							
	1	Exter	nal Samp	ole Number:					
Expected Conc	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)		
Latitude:		San	nple Coll	ection: Star	t://_	-	;		
Longitude:				End	i: <u>4</u> /24//	l	<u> </u>		
Laboratory An	alyses:		····	***					
Container	Preservative	Holdi	ng Time	Analysis					
1 - 8 oz glass	4 Deg C	180) Days	1 Metals in So	olids by ICP-AES				
Sample Comme	ents:								

(N/A)

XRF #1535
Average XRF-Pb: 217 ppm

ASR Number:	lumber: 6410 Sample Number: 27 QC Code: Mati		rix: Solid	Tag II	D: 6410-27						
Project ID:				ject Manage	: Jason Gur	nter					
-	•	ig River Mine Tailings - Removal Action sampling									
•	Park Hills										
_	Superfund BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURC			ERALS CORP	Site ID:	07CR	Site OU: 01				
Location Desc:	93(1-DW-5:F-C)	0									
		Externa	l Samp	ole Number:			-,				
Expected Conc	(or Circle One:	Low N	1edium	High)	Date		Time(24 hr)				
Latitude:		Samp	le Coli	ection: Start:		_	_:_				
Longitude:				End:	2/35/14	_	<u>157.40</u>				
Laboratory Ar	nalyses:					 ,					
Container	Preservative	Holding	Time	Analysis							
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Sol	ds by ICP-AES						
Sample Comm	ents:										
(N/A)											

XRF #1535
Average XRF-Pb: 411 ppm

ASR Number:	Sample Number:	28	QC Cod	le: Ma	trix: Solid	Tag ID: 6410-28	_
-	Big River Mine Tailings - R	Remova		· -		nter	
Program:	Park Hills Superfund BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE				e: Missouri - Site ID:	07CR Site OU: 01	
Location Desc:	9302-C1-SF-CP						
	I	Externa	al Samp	le Number:			_
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hi	r)
Latitude:		Samp	ole Coll	ection: Start	://_	:	
Longitude:				End	: <u>2/357/4</u>	16:10	
Laboratory An	alyses:	Holding	ı Time	Analysis			
1 - 8 oz glass	4 Deg C			1 Metals in So	lids by ICP-AES		
Sample Comme	ents:						
(N/A)							

XRF #1535

Average XRF-Pb: 1069 ppm

ASR Number:	6410 Sample Numbe	r: ²⁹ QC	Code: Mat	rix: Solid Tag	ID: 6410-29					
Project ID: Project Desc:	: Jason Gunter									
•	Park Hills									
_	Superfund BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			Site ID: 07C	R Site OU: 01					
Location Desc:	-7287 LSSE	D6 9	287-15-51	F-CP						
		External Sa	mple Number:							
Expected Conc	: (or Circle One	e: Low Medi	um High)	Date	Time(24 hr)					
Latitude:		Sample C	Collection: Start:		:					
Longitude:			End:	2 P6 1/4	14:25					
Laboratory An	nalyses:									
Container	Preservative	Holding Tim	e Analysis							
1 - 8 oz glass	4 Deg C	180 Day	rs 1 Metals in Soli	ds by ICP-AES						
Sample Comm	ents:									
(N/A)										

XRF #1535

Average XRF-Pb: 789 ppm

ASR Number:	6410 Sample Number:	30	QC Co	de: Matı	ix: Solid	Tag I	D: 6410-30		
-	Big River Mine Tailings - I	Remova				nter			
•	Park Hills								
Program: Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	•		ERALS CORP	Site ID:	07CR	Site OU: 01		
Location Desc:	9308-03-51	F-C1	0						
		Extern	al Samp	ole Number:		···=			
Expected Conc	: (or Circle One:	Low	Medium	High)	Date		Time(24 hr)		
Latitude:		Sam	ple Coll	ection: Start:	//_	-	_:_		
Longitude:				End:	2 126/10	\mathcal{L}	15:20		
Laboratory An	nalyses:								
Container	Preservative	Holdin	g Time	Analysis					
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solid	s by ICP-AES				
Sample Comm	ents:								
(N/A)									

XRF #1535

Average XRF-Pb: 1220 ppm

ASR Number:	6410 Sample Number:	31 QC Co	de: Matrix: S	olid Tag I	D: 6410-31				
Project ID:	JG7CR01	Pro	ject Manager: Jaso	on Gunter					
Project Desc:	Big River Mine Tailings - !	Removal Action	sampling						
City:	Park Hills	Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	·	ERALS CORP Site	e ID: 07CR	Site OU: 01				
Location Desc:	9309-C1-5	F-CA							
		External Samp	ole Number:						
Expected Conc	(or Circle One:	Low Medium	High)	ate	Time(24 hr)				
Latitude:		Sample Coll	ection: Start:	'/_	_:_				
Longitude:			End: 2	1261 <u>/</u> 4	15:55-				
Laboratory An	alyses:								
Container	Preservative	Holding Time	Analysis						
1 - 8 oz giass	4 Deg C	180 Days	1 Metals in Solids by I	CP-AES					
Sample Commo	ents:								

XRF #1535

Average XRF-Pb: 402 ppm

Sample Collected By: DG/TT

ASR Number:	6410 Sample Nui	nber: 101	QC Cod	de: Matr	ix: Water Tag	ID: 6410-101			
Project ID:	JG7CR01		Pro	ject Manager:	Jason Gunter				
Project Desc:	Big River Mine Tailir	ngs - Remova	Action	sampling					
City:	Park Hills	rk Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TA RESIDENTIAL ACT/S	•		RALS CORP	Site ID: 07CR	Site OU: 01			
Location Desc:	BRMT-926	8	Sink	-Upporg	ول				
		Extern	al Samp	ole Number: _					
Expected Conc	: (or Circle	One: Low	Medium	High)	Date	Time(24 hr)			
Latitude:		Sam	ple Coll	ection: Start:		:			
Longitude:				End:	2/18/14	15:17			
Laboratory An	alyses:				· · · · · · · · · · · · · · · · · · ·				
Container	Preservative	Holdin	g Time	Analysis					
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	r by ICP/MS				
Sample Commo	ents:								
(N/A)									

ASR Number:	6410	Sample Number:	: 102	QC Co	de: Mat	rix: Water Tag	ID: 6410-102				
Project ID:	JG7CR0	1		Pro	ject Manager	: Jason Gunter					
Project Desc:	Big Rive	ig River Mine Tailings - Removal Action sampling									
City:	Park Hil	· · ·									
Program:	Superfu										
Site Name:		ER MINE TAILING NTIAL ACT/SOUR(-		ERALS CORP	Site ID: 07CF	Site OU: 01				
Location Desc:	BR	MT-9268		Sink	- Purge						
		!	Extern	al Samp	ole Number:						
Expected Conc	:	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)				
Latitude:	1		Sam	ple Coll	ection: Start:	/ /	:				
Longitude:						2/18/14	15:22				
Laboratory Ar	nalyses:										
Container	Pre	eservative	Holdin	g Time	Analysis						
1 - 1 Liter Cubitaine	er HN	03 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS					
Sample Comm	ents:	····									
(N/A)											

ASR Number:	6410 · Sample Number	: 103 Q	C Code:	Matrix: Water	Tag ID: 6410-103
Project ID:	JG7CR01		Project Ma	anager: Jason Gur	nter
Project Desc:	Big River Mine Tailings -	Removal A	ction samplir	ng	
•	Park Hills	•	•	State: Missouri	
Program:					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		ORP Site ID:	07CR Site OU: 01
Location Desc:	BRWT-9268		Horant	- Unpurga	
		External S	Sample Nun	nber:	
Expected Conc	: (or Circle One	: Low Me	dium High)	Date	Time(24 hr)
Latitude:		Sample	Collection:	Start://_	-
		-		End: 2/8/1	4 15:11
Laboratory Ar	nalyses:				· · · · · · · · · · · · · · · · · · ·
Container	Preservative	Holding Ti	me Analy	/sis	•
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 [Days 1 Meta	els in Water by ICP/MS	
Sample Comm	ents:				
(N/A)					· ·

ASR Number:	6410 Sample Number:	104	QC Co	de: Mat	rix: Water Tag	ID: 6410-104
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRWT-9268		thy	rent-p	inged	
		Extern	al Samp	ole Number:	· · · · · · · · · · · · · · · · · · ·	
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	pie Coll	ection: Start:		_:_
Longitude:				End:	2/18/14	15:16
Laboratory Ar	nalyses:			················		
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:	 -				······································

Sample Collected By: DG/TT

ASR Number:	6410	Sample Numb	er: 105	QC Co	de: Ma	trix: Water	Tag I	D: 6410-105
Project ID: Project Desc:			s - Remov		oject Manage	r: Jason Gu	nter	
City:	Park H	ills	3 INCHIOV	a Accion		e: Missouri		
Program: Site Name:	BIG RI	und VER MINE TAILI ENTIAL ACT/SO			ERALS CORP.	Site ID:	07CR	Site OU: 01
Location Desc:	BR	MT-9a	67		SINK-	Murge	5	
			Exter	nal Sam	ple Number:			
Expected Conc	::	(or Circle O	ne: Low	Medium	High)	Date		Time(24 hr)
Latitude:			San	nple Col	lection: Start	://_		'
Longitude:					End	: 2/18/1	4	13:35
Laboratory An	nalyses							
Container 1 - 1 Liter Cubitaine		r eservative NO3 to pH<2		ng Time O Days	Analysis 1 Metals in Wa	ater by ICP/MS		
Sample Comme	ents:							
(N/A)								

ASR Number:	6410 S a	ample Number:	106	QC Co	de: M	atrix: Wate	r Tag	ID: 6410-106
Project ID:	JG7CR01			Pro	ject Manag	er: Jason G	unter	
Project Desc:	Big River	Mine Tailings - F	Remova	al Action	sampling			
City:	Park Hills	;			Sta	te: Missouri		
Program:	Superfun	d						
Site Name:		R MINE TAILING TIAL ACT/SOURC			ERALS CORP.	- Site ID	: 07CR	Site OU: 01
Location Desc:	BRW	17-9267		Sinl	C-)urg	-0		
		I	Extern	al Samı	ole Number:			
Expected Conc	:	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:			Sam	ple Coll	ection: Sta			_:
Longitude:		· 			En	d: 2/18/	14	1 <u>4:0</u> 0
Laboratory Ar	nalyses:				 			
Container	Pres	ervative	Holdin	ng Time	Analysis			
1 - 1 Liter Cubitaine	r HNO	3 to pH<2	180	Days	1 Metals in V	Vater by ICP/M	5	
Sample Comm	ents:					<u> </u>		· · · · · · · · · · · · · · · · · · ·
(N/A)								

ASR Number:	6410 Sample Number	: 107	QC Cod	de: Matr	ix: Water Tag	ID: 6410-107
Project ID:	JG7CR01		Pro	ject Manager:	: Jason Gunter	
Project Desc:	Big River Mine Tailings -	Remova	I Action	sampling		
City:	Park Hills			States	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		RALS CORP	Site ID: 07Cl	R Site OU: 01
Location Desc:	BRMT-9267		Hy	drant-	Unpurge	حـــــــــــــــــــــــــــــــــــــ
		Extern	al Samp	ole Number:		
Expected Conc	: (or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	pie Coll	ection: Start:	//	:
Longitude:				End:	218/14	14:05
Laboratory Ar	ialyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample Number	r: 108	QC Co	de: Mati	rix: Water Ta	ag ID: 6410-108
Project ID:	JG7CR01		Pro	oject Manager	: Jason Gunte	r
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		ERALS CORP	Site ID: 07	CR Site OU: 01
Location Desc:	BRMT-926	7		ydract-	Purgo	
		Extern	al Samı	ole Number:	<u> </u>	
Expected Conc	: (or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:		_:_
Longitude:				End:	21814	14:10
Laboratory An	nalyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Commo	ents:		 _		 	
(N/A)						

ASR Number:	6410 Sample Numb	er: 109	QC Code	: Matr	ix: Water Tag	ID: 6410-109
Project ID:	JG7CR01		Proje	ct Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings	- Removal	Action sa	ampling		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILII RESIDENTIAL ACT/SOL	•		ALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRMT-926	6	_	SINK-U	Apsryed	
		Externa	Sample	Number:	·	
Expected Conc	: (or Circle Or	ne: Low M	ledium H	ligh)	Date	Time(24 hr)
Latitude:		Samp	le Collec	tion: Start:	/ /	:
		·			21814	1 <u>2:0</u> 0
Laboratory Ar	nalyses:		······································	·		
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample Numb	er: 110	QC Co	de: Mat	rix: Water Ta	g ID: 6410-110
Project ID:	JG7CR01		Pro	oject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings	- Remova	l Action	sampling		
-	Park Hills				: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILII RESIDENTIAL ACT/SOL	•		ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT-9260	•	Sin	IK-Purg	ed	
		Externa	al Samı	ole Number:		
Expected Conc	: (or Circle Or	ne: Low I	Medium	High)	Date	Time(24 hr)
Latitude:		Samo	ole Coll	ection: Start:	/ /	:
					218/14	12:05
Laboratory An	alyses:					
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	111	QC Cod	le: Matı	r ix: Water Ta	ig ID: 6410-111
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	-
Project Desc:	Big River Mine Tailings - F	Remova	l Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	-		RALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	BRMT-926(e	<	Spigot-	- Unpurga	
	I	Externa	al Samp	le Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Samp	ole Colle	ection: Start:		;
Longitude:				End:	2/8/14	12:14
Laboratory Ar	nalyses:					
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

ASR Number:	6410	Sample Numbe	er: 112	QC Co	de: Ma	atrix: Water	Tag I	D: 6410-112
Project ID:	JG7CR0	01	<u>=</u>	Pro	oject Manag	er: Jason Gur	nter	
Project Desc:	Big Riv	er Mine Tailings	- Remova	I Action	sampling			
City:	Park Hi	lls			Sta	te: Missouri		
Program:	Superfu	ınd						
Site Name:		/ER MINE TAILIN NTIAL ACT/SOU			ERALS CORP.	- Site ID:	07CR	Site OU: 01
Location Desc:	BK	WT-9264	0	5	pigot	- Purg-	ed	
			Extern	al Samı	ole Number:			
Expected Conc	:	(or Circle On	ne: Low	Medium	High)	Date		Time(24 hr)
Latitude:	:		Sam	ple Coll	ection: Star	t://_		:
Longitude:			·	•		d: 2/18/1		1219
Laboratory Ar	nalyses:							
Container	Pr	eservative	Holding	g Time	Analysis			
1 - 1 Liter Cubitaine	er HN	IO3 to pH<2	180	Days	1 Metals in W	ater by ICP/MS		
Sample Comm	ents:						· · · · · · · · · · · · · · · · · · ·	
(N/A)								

ASR Number:	6410 Sample Number:	113 Ç	C Code:	Matr	ix: Water Tag	ID: 6410-113
Project ID:	JG7CR01		Project M	lanager:	Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal A	Action sampl	ing		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT- 923	8	Sin	K - U	Apurged	····
	1	External	Sample Nu	mber: _		
Expected Conc	(or Circle One:	Low Me	edium High))	Date	Time(24 hr)
Latitude:		Sample	e Collection	: Start:	//	:_
Longitude:				End:	2/15/14	10:12
Laboratory An	alyses:					
Container	Preservative	Holding T	ime Ana	lysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2	180	Days 1 Me	tals in Wate	er by ICP/MS	
Sample Commo	ents:		······································	 -		
(N/A)						

ASR Number:	6410 Sample Number:	114	QC Co	de: Matı	r ix: Water T	ag ID: 6410-114
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings - I	Remova		ject Manager sampling	: Jason Gunte	er
City:	Park Hills			State	: Missouri	
Program:	•					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			ERALS CORP	Site ID: 07	7CR Site OU: 01
Location Desc:	BRWT-923	8		SinK-p	urgeo	
		Externa	il Samı	ole Number:		
Expected Conc	(or Circle One:	Low I	Medium	High)	Date	Time(24 hr)
Latitude:		Samp	le Coll	ection: Start:	//	:
Longitude:				End:	215714	10:17
Laboratory An	alyses:	<u></u>				
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:				*	
(N/A)						

ASR Number:	6410 S a	ample Number:	115	QC Co	de: Mat	rix: Water	Tag ID: 6410-115		
Project ID:	JG7CR01			Pro	ject Manager	: Jason Gunt	er		
Project Desc:	Big River	Mine Tailings - I	Remova	1 Action	sampling				
_	Park Hills	_			· -	: Missouri			
Program:	Superfun	d							
Site Name:		R MINE TAILING TIAL ACT/SOURC			ERALS CORP	Site ID: 0	7CR Site OU: 01		
Location Desc	: _ 5 K	2MT-92	38	,	Spigot	-Unpur	900		
		1	Extern	al Samp	ole Number:				
Expected Conc	::	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)		
Latitude:	l		Sami	ole Coll	ection: Start:	/ /	:		
Longitude:			2 23334			215714	1 1024		
Laboratory Ar	nalyses:								
Container	Pres	ervative	Holding	g Time	Analysis				
1 - 1 Liter Cubitaine	er HNO	3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS			
Sample Comm	ents:								
(N/A)									

ASR Number:	6410 Sample Numbe	r: 116 (C Code: _	Matrix: Water	Tag ID: 6410-116
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings -	Removal /	_	Manager: Jason Gui pling	nter
City:	Park Hills			State: Missouri	
Program:	•				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			S CORP Site ID:	07CR Site OU: 01
Location Desc:	BRMT-923	8	Sp	igot-purge	.0
		External	Sample N	umber:	
Expected Conc	: (or Circle One	: Low M	edium Hìgl	h) Date	Time(24 hr)
Latitude:		Sampl	e Collectio	on: Start:/_/_	— - -
Longitude:				End: 2/5/1	4 10.29
Laboratory An	nalyses:				
Container	Preservative	Holding 1	ime Ar	nalysis	
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days 1 M	letals in Water by ICP/MS	
Sample Commo	ents:				
(N/A)					

ASR Number:	6410 Sample Number:	117	QC Co	de: Matı	rix: Water Tag	ID: 6410-117
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE	-		ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRWT-9269		5	PINK-UP	purged	
	ı	Extern		ole Number:	<u>'</u>	
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	/	
Longitude:				End:	2/19/14	10:10
Laboratory An	nalyses:					
Container	Preservative	Holdin	ıg Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample	Number: 11	8 QC Co	de: Matr	ix: Water Tag	ID: 6410-118		
Project ID: JG7CR01 Project Manager: Jason Gunter Project Desc: Big River Mine Tailings - Removal Action sampling City: Park Hills State: Missouri								
Program:		•			, , , , , , , , , , , , , , , , , , , ,	Site OU: 01		
Location Desc:	BRWT	-9269	<u> </u>	SinK-p	ingred			
		Exte	ernal Samı	ole Number: _				
Expected Conc	: (or (Circle One: Lo	w Medium	High)	Date	Time(24 hr)		
		Sa	ample Coll	ection: Start: End:	2/19/14	10:15		
Laboratory An	-	· · · · · · · · · · · · · · · · · · ·				 		
Container 1 - 1 Liter Cubitaine	Preservativ r HNO3 to pH		Iding Time 180 Days	•	er by ICP/MS			
Sample Commo	ents:							
(N/A)								

ASR Number:	6410 Sample Number	r: 119	QC Co	de: Matı	ix: Water Tag	ID: 6410-119
Project ID:	JG7CR01	-	Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRMT-9269		+	ydrent - U	Aproject	
		Extern	al Samı	ole Number:		
Expected Conc	: (or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	;
Longitude:				End:	2/19/14	10:00
Laboratory Ar	nalyses:			<u> </u>		
Container	Preservative	Holdin	ıg Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	120	QC Cod	le: Matr	ix: Water	Tag ID	6410-120-
Project ID:	JG7CR01		Pro	ject Manager:	: Jason Gun	ter	
Project Desc:	Big River Mine Tailings - F	lemova	I Action	sampling			
City:	Park Hills			State:	: Missouri		
Program:	Superfund						
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC	•		RALS CORP	Site ID: (07CR \$	Site OU: 01
Location Desc:	BRMT-9269		Hy	rdrant - p	urged		
	E	Externa	al Samp	le Number:			
Expected Conc	: (or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:		Samı	ple Colle	ection: Start:	//		_:_
Longitude:				End:	2/19/14	t	10:05
Laboratory An	alyses:						
Container	Preservative	Holding	; Time	Analysis			
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS		
Sample Commo	ents:						

Sample Collected By: DG/TT

ASR Number:	6410 Sample Num	ber: 121	QC Co	de: Mati	rix: Water Tag	ID: 6410-121
Project ID: Project Desc:	JG7CR01 Big River Mine Tailing	ıs - Remov		ject Manager	: Jason Gunter	
	Park Hills	,			: Missouri	
•	Superfund					
Site Name:	BIG RIVER MINE TAIL RESIDENTIAL ACT/SC	-		ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRMT- 92	70	5.	nk an	surged	
		Extern	al Samp	ole Number:		
Expected Conc	: (or Circle (One: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:		:
Longitude:				End:	3/14/14	10:4Z
Laboratory An	nalyses:					
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	122	QC Cod	de: Mati	rix: Water T	ag ID: 6410-122
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunte	r
Project Desc:	Big River Mine Tailings - I	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	-		RALS CORP	Site ID: 07	CR Site OU: 01
Location Desc:	BRMT-9270		sink	purged		As a college of the c
	1	Extern	al Samp	le Number:	· · · · · · · · · · · · · · · · · · ·	
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	_/_/_	:
Longitude:				End:	2114114	10:47
Laboratory An	alyses:	,,		7.77		
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample Nu	mber: 123	QC Co	de: Matr	ix: Water Tag	ID: 6410-123
Project ID:	JG7CR01		Pro	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailin	ngs - Remova	I Action	sampling		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TA RESIDENTIAL ACT/S			ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT-9	270	5pig	not Claper	rged	
		Externa	al Samp	ole Number:		
Expected Conc	: (or Circle	One: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Samı	ple Coll	ection: Start:		:
Longitude:				End:	2/14/14	10:55
Laboratory Ar	alyses:					
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:		 - · · · ·			
(N/A)						

ASR Number:	6410 Sample Number	124	QC Cod	e: Mat	rix: Water Tag	ID: 6410-124
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings -	Removal	Action :	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT-9270	j	50:	got Parg	ed	
		Externa	i Samp	le Number:		
Expected Conc	: (or Circle One:	Low M	ledium	High)	Date	Time(24 hr)
Latitude:		Samp	le Colle	ction: Start:	_/_/_	:
Longitude:				End:	2_1141/4	<u> </u>
Laboratory Ar	nalyses:					
Container	Preservative	Holding	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

ASR Number:	6410 Sample Numb	per: 125	QC Co	de: Mat	rix: Water Tag	ID: 6410-125			
Project ID: Project Desc:	JG7CR01 Big River Mine Tailing	s - Remova		-	: Jason Gunter				
City:	Park Hills	Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAIL RESIDENTIAL ACT/SO			ERALS CORP	Site ID: 07CF	Site OU: 01			
Location Desc:	BRMT-92	71		Sink G	asarged				
		Extern	al Samı	ole Number:					
Expected Conc	(or Circle O	ne: Low	Medium	High)	Date	Time(24 hr)			
Latitude:		Sam	ple Coli		_/_/_				
Longitude:				End:	2119114	(<u>/</u> : <u>/.5</u>			
Laboratory An	alyses:								
Container	Preservative	Holdin	g Time	Analysis					
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS				
Sample Commo	ents:								
(N/A)									

ASR Number:	6410 Sample Number:	126	QC Co	de: Mat	rix: Water Tag	ID: 6410-126
Project ID:	JG7CR01		Pro	ject Managei	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Remov	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT 927	/		Sin K	Parged	
	1	Extern	nal Samp	ole Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	;
Longitude:				End:	4_118114	1[:20
Laboratory Ar	alyses:					
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	ter by ICP/MS	
Sample Commo	ents:		·		_, ·u.	

Sample Collected By: DG/TT

ASR Number:	6410 Sample I	Number: 127	QC Cod	le: Matr	ix: Water Tag	ID: 6410-127
Project ID: Project Desc:	JG7CR01 Big River Mine Ta	ailings - Remov	•	ject Manager: sampling	Jason Gunter	
•	Park Hills			State:	Missouri	
Program: Site Name:	Superfund BIG RIVER MINE RESIDENTIAL AC	•		RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT	9271		5pgot	Unparged	
		Exter	nal Samp	le Number:		
Expected Conc	: (or Ci	rcle One: Low	Medium	High)	Date	Time(24 hr)
Latitude:		San	nple Colle	ection: Start:	//	
Longitude:				End:	2119114	14:25
Laboratory An	ialyses:					
Container	Preservative	Holdi	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	2 180) Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:			 		
(N/A)						

ASR Number:	6410 Sample Number:	128	QC Cod	le: Mati	rix: Water Ta	g ID: 6410-128
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remova	Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC			RALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	BRUT 927	·(5 ₀₁	get larged	(
	E	Extern	al Samp	le Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	pie Colle	ection: Start:	//	_:_
Longitude:				End:	-1-1- 1-118114	<u>M:3</u> c
Laboratory Ar	nalyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:				··	

Sample Collected By: DG/TT

ASR Number:	6410 Sample Num	ber: 129 QC Co	de: Matr	ix: Water Tag	ID: 6410-129
Project ID: Project Desc:	JG7CR01 Big River Mine Tailing		oject Manager:	Jason Gunter	
=	Park Hills	, , , , , , , , , , , , , , , , , , , ,		Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAIL RESIDENTIAL ACT/SO		ERALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT	9272	Sink	Clapunge	<u>d</u>
		External Sam	ple Number: _		
Expected Conc	(or Circle	One: Low Medium	n High)	Date	Time(24 hr)
Latitude:		Sample Col	lection: Start:	//	;
Longitude:			End:	2/19/14	1 <u>3:30</u>
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2	180 Days	1 Metals in Wate	r by ICP/MS	
Sample Commo	ents:				

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	130	QC Cod	de: Mati	rix: Water Tag	ID: 6410-130
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Remov	al Action	sampling		
City:	Park Hills			State	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CF	Site OU: 01
Location Desc:	BRMT 927	1	5 .,.	k Pargo	1	
		Extern	ial Samp	le Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	_:_
Longitude:	<u></u>			End:	Z/18/14	13:35
Laboratory An	alyses:		 _		<u> </u>	
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number	131	QC Co	de: Mate	rix: Water Ta	g ID: 6410-131
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			ERALS CORP	Site ID: 070	R Site OU: 01
Location Desc:	BRMT 9272	?		Fink an	Surged	
		Extern	al Samp	ole Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:		:
Longitude:				End:	2/19/14	14:10
Laboratory Ar	alyses:					
Container	Preservative	Holdin	ıg Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

ASR Number:	Sample Number: 132	QC Code: M	datrix: Water Tag	J ID: 6410-132
Project ID:	JG7CR01	Project Mana	ger: Jason Gunter	
Project Desc:	Big River Mine Tailings - Remov	val Action sampling		
City:	Park Hills	St	ate: Missouri	
Program:	Superfund			
Site Name:	BIG RIVER MINE TAILINGS/ST. RESIDENTIAL ACT/SOURCE CO		P Site ID: 07C	R Site OU: 01
Location Desc:	BRMT 9273	Sink	Aroyed	
	Exter	nal Sample Number	r:	
Expected Conc	(or Circle One: Low	Medium High)	Date	Time(24 hr)
Latitude:	Sar	nple Collection: Sta	ort://	:
Longitude:		E	nd: <u>4</u> / <u>/</u> 9/ <u>/</u> 4	14:15
Laboratory An	alyses:			
Container	Preservative Holdi	ing Time Analysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2 18	0 Days 1 Metals in	Water by ICP/MS	
Sample Commo	ents:			

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	: 133 QC Co	ie: Matr	ix: Water Tag	ID: 6410-133
Project ID:	JG7CR01	Pro	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Removal Action	sampling		
City:	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		RALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT 827	3	Hydrant	- Chipurg.	ed
	I	External Samp	le Number:		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:	//	:
Longitude:			End:	2/19/14	14:35
Laboratory An	alyses:		·		
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:				

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	134 QC	Code: Ma	trix: Water Tag	ID: 6410-134
Project ID:	JG7CR01		Project Manage	er: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Removal Act	ion sampling		
City:	Park Hills		Stat	e: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	•		- Site ID: 07CR	Site OU: 01
Location Desc:	BRMT 927:	₹	Hydraut	Aurged	
	1	External Sa	imple Number:		
Expected Conc	(or Circle One:	Low Medi	um High)	Date	Time(24 hr)
Latitude:		Sample C	Collection: Start	:/	:_
Longitude:			End	: ¾_/(q//4	14:30
Laboratory Ar	nalyses:	<u> </u>			
Container	Preservative	Holding Tim	e Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Day	ys 1 Metals in Wa	ater by ICP/MS	
Sample Comm	ents:				

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number:	135 QC C	ode: Mat	rix: Water Tag	ID: 6410-135
Project ID:	JG7CR01	Pr	oject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Removal Action	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC	-	ERALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT 9285		5ink Cl	rawged	
	ı	External Sam	ple Number:		
Expected Conc	(or Circle One:	Low Mediun	n High)	Date	Time(24 hr)
Latitude:		Sample Col	lection: Start:	//	:
Longitude:			End:	2 121114	(1: Ls
Laboratory Ar	nalyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:				

Sample Collected By: DG/TT

ASR Number:	6410 Sample Number	: 136	QC Co	de: Mati	rix: Water Ta	g ID: 6410-136
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings -	Remov		ject Manager sampling	: Jason Gunter	
-	Park Hills			• -	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		ERALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	BRMT 8285	-	-	Sink Pur	ried	
		Extern	al Samp	ole Number:		
Expected Conc	(or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	_/_/_	:
Longitude:				End:	3/31/14	11:20
Laboratory Ar	nalyses:	<u>-</u>				
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:		·			
(N/A)						

ASR Number:	6410 Sample Number:	137 QC C	ode: Mat	rix: Water Tag	ID: 6410-137
Project ID:	JG7CR01	Pi	roject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		NERALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT 9285		5piget	Unpurged	
	İ	External San	nple Number:		
Expected Conc	: (or Circle One:	Low Mediui	n High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:		:
Longitude:			End:	2/21/14	11:05
Laboratory An	alyses:			· · · · · · · · · · · · · · · · · · ·	and the second s
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wat	er by ICP/MS	
Sample Commo	ents:				
(N/A)					

ASR Number:	6410 Sample Nun	iber: 138 QC Co	ode: Mat	rix: Water T	'ag ID: 6410-138
Project ID:	JG7CR01	Pr	oject Manager	: Jason Gunte	er
Project Desc:	Big River Mine Tailin	gs - Removal Actior	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAI RESIDENTIAL ACT/S	-	ERALS CORP	Site ID: 07	7CR Site OU: 01
Location Desc:	BRMT	7285	Spigot	Parged	
		External Sam	ple Number:		
Expected Conc	: (or Circle	One: Low Mediun	n High)	Date	Time(24 hr)
Latitude:		Sample Col	lection: Start:		_:_
Longitude:			End:	3 HILLY	<u> </u>
Laboratory Ar	nalyses:		······································		
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:				

(N/A)

ASR Number:	6410 Sample Numb	oer: 139 (QC Code	: Matr	ix: Water Tag	ID: 6410-139
Project ID:	JG7CR01		Proje	ct Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailing	s - Removal	Action sa	ampling		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAIL RESIDENTIAL ACT/SO			ALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT 90	186		Sink C	lapunged	
		External	Sample	Number: _		
Expected Conc	: (or Circle C	ne: Low M	ledium H	ligh)	Date	Time(24 hr)
Latitude:		Sampl	le Collec	tion: Start:	//	:
Longitude:				End:	2/20/4	11:25
Laboratory Ar	alyses:	· · · · · · · · · · · · · · · · · · ·				
Container	Preservative	Holding '	Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	r by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

(N/A)

ASR Number:	6410 Sample Nu	mber: 140	QC Co	de: Matr	ix: Water Tag	ID: 6410-140
Project ID:		nas Domovis		ject Manager:	Jason Gunter	
_	Big River Mine Taili Park Hills	ngs - Remova	al Action		Missouri	
Program:						
Site Name:	BIG RIVER MINE TA RESIDENTIAL ACT/			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT	9286		Sink F	jurged	
		Extern	al Samp	le Number: _		
Expected Conc	: (or Circle	e One: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	pie Coli	ection: Start:	//	:
Longitude:				End:	2/21/14	<u>((:30</u>
Laboratory Ar	nalyses:		 			
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	r by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample Number	: 141	QC Co	de: Mat	rix: Water Tag	ID: 6410-141
Project ID:	JG7CR01		Pro	oject Managei	: Jason Gunter	
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR			ERALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT - 9282	Si	nk an	puroch		
		Extern	al Samp	ole Number:		
Expected Conc	: (or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	2/21/14	<u>09</u> :15
Longitude:				End:	_/_/_	
Laboratory An	alyses:				1,177, 5,0	
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wa	ter by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410	Sample Number:	142	QC Co	de: Ma	ı trix: Water	Tag 1	ID: 6410-142
Project ID:	JG7CR0	1		Pro	ject Manage	er: Jason Gu	ınter	
Project Desc:	Big Rive	er Mine Tailings - F	Remova	I Action	sampling			
City:	Park Hil	ls			Stat	te: Missouri		
Program:	Superfu	nd						
Site Name:		'ER MINE TAILING NTIAL ACT/SOURC			ERALS CORP.	- Site ID:	: 07CR	Site OU: 01
Location Desc:	BR	MT-9282		Sink	Purged			
		1			ole Number:			
Expected Conc	::	(or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:		<u> </u>	Samp	ole Coll	ection: Star	t://_		:
Longitude:					End	1: 2/31/	14	0 <u>4 :20</u>
Laboratory Ar	nalyses:							
Container	Pro	eservative	Holding) Time	Analysis			
1 - 1 Liter Cubitaine	er HN	O3 to pH<2	180	Days	1 Metals in W	ater by ICP/MS	;	
Sample Comm	ents:		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			·
(N/A)								

ASR Number:	6410 Sample Number:	143	QC Co	de: Ma	trix: Water Ta	g ID: 6410-143
Project ID:	JG7CR01	-	Pro	ject Manage	r: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remov	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			ERALS CORP	Site ID: 070	CR Site OU: 01
Location Desc:	BRMT - 9282		Spigot	Unpurgal		
	ı	Extern	al Samp	ole Number:		
Expected Conc	: (or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start	: _/_/_	;
Longitude:				End	= 3/21/14	04: <u>30</u>
Laboratory An	ıalyses:					
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wa	ter by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample	Number: 144	QC Co	de: Mat	rix: Water Tag	ID: 6410-144
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine T	ailings - Remov	val Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE RESIDENTIAL AC			ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT -	9282	Spigot	funged		
		Exter	nal Samp	ole Number:		
Expected Conc	: (or Ci	rcle One: Low	/ Medium	High)	Date	Time(24 hr)
Latitude:	 - <u></u> -	Sar	mple Coll	ection: Start:	//	_:
Longitude:				End:	3/31/14	<u>09</u> :35
Laboratory Ar	nalyses:	•				
Container	Preservative	e Hold	ing Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<	2 18	0 Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:			· u		·
(N/A)						

ASR Number:	6410 Sample Number:	145	QC Co	de: Ma	trix: Water	Tag I	D: 6410-145
Project ID:	JG7CR01		Pro	ject Manage	r: Jason Gu	nter	
Project Desc:	Big River Mine Tailings - F	Remova	al Action	sampling			
City:	Park Hills			State	e: Missouri		
Program:	Superfund						
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC	•		ERALS CORP	Site ID:	07CR	Site OU: 01
Location Desc:	SRMT-4283		SINK	Purgad			
	į	Extern	al Samp	ole Number:		- · - · -	
Expected Conc	: (or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start	://_	_	:
Longitude:				End	: <u> </u>	4	<u>10 : 05</u>
Laboratory An	nalyses:						
Container	Preservative	Holdin	ıg Time	Analysis			
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wa	iter by ICP/MS		
Sample Commo	ents:	·					· · · · · · · · · · · · · · · · · · ·
(N/A)							

ASR Number:	6410 Sample Number:	146 QC C	ode: Mate	rix: Water Tag	ID: 6410-146
Project ID:	JG7CR01	Pi	roject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		NERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRMT - 4283	Sink Un	purged		
	į	External San	nple Number:		
Expected Conc	(or Circle One:	Low Mediu	m High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:	//	:
Longitude:			End:	<u> अज्ञात</u>	<u>[U: 60</u>
Laboratory An	ialyses:		, , , , , , , , , , , , , , , , , , ,	····	
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:				
(N/A)					

ASR Number:	6410 Sample Number:	147	QC Cod	de: Mat	rix: Water Tag	ID: 6410-147
Project ID:	JG7CR01		Pro	ject Manageı	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	•					
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT- 9284	Hyd	rarit 4.	npuryed		
	+	Extern	al Samp	le Number:		
Expected Conc	: (or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	:
Longitude:				End:	2/21/14	10:05
Laboratory An	ialyses:	,,				
Container	Preservative	Holdin	ıg Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Commo	ents:					
44-3						

(N/A)

ASR Number:	6410 Sam	ple Number:	148	QC Cod	le: N	latri	ix: Water Tag	ID: 6410-148
Project ID:	JG7CR01			Pro	ject Mana	ger:	Jason Gunter	
Project Desc:	Big River M	ne Tailings - R	Removal	Action	sampling			
City:	Park Hills				St	ate:	Missouri	
Program:	Superfund				•			
_	BIG RIVER	MINE TAILINGS AL ACT/SOURC			RALS CORF)	Site ID: 07C	Site OU: 01
Location Desc:	BRMT	- 4284	Hydi	rout-	Purged			
		ε	Externa	i Samp	le Numbe	r: _	 	
Expected Conc	. (or Circle One:	Low N	Medium	High)		Date	Time(24 hr)
Latitude:			Samp	le Colle	ection: Sta	rt:	_/_/_	:_ _
Longitude:		_			E	nd:	3731/14	10.00
Laboratory Ar	nalyses:							
Container	Preserv	ative	Holding	Time	Analysis			
1 - 1 Liter Cubitaine	r HNO3 to	pH<2	180	Days	1 Metals in	Water	r by ICP/MS	
Sample Comm	ents:				1-0			
(N/A)								

ASR Number:	6410 Sample Number:	149	QC Cod	de: Mai	trix: Water	Tag I	(D: 6410-149		
Project ID:	JG7CR01		Pro	ject Manage	r: Jason Gui	nter			
Project Desc:	Big River Mine Tailings - F	Remova	al Action	sampling					
City:	Park Hills			State	e: Missouri				
Program:	Superfund	uperfund							
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	-		RALS CORP	Site ID:	07CR	Site OU: 01		
Location Desc:	BRMT - 9244	50	igot U	quirged					
	1	Extern	al Samp	le Number:		 			
Expected Conc	: (or Circle One:	Low	Medium	High)	Date		Time(24 hr)		
Latitude:		Sam	ple Coll	ection: Start	://_	_	:		
Longitude:				End	: 1/3/1	4	14:00		
Laboratory Ar	nalyses:								
Container	Preservative	Holdin	ıg Time	Analysis					
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wa	ter by ICP/MS				
Sample Comm	ents:								

(N/A)

ASR Number:	6410 Sample Number:	150 QC C	ode: Mati	rix: Water Tag	ID: 6410-150
Project ID:	JG7CR01	Pr	oject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Removal Action	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		IERALS CORP	Site ID: 07Cl	R Site OU: 01
Location Desc:	BRMT - 4299	Spigot Pus	rgal		
		External Sam	ple Number:		
Expected Conc	(or Circle One:	Low Mediur	n High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:	_/_/_	;
Longitude:			End:	3/21/14	14: 05
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:				

(N/A)

ASR Number:	6410 Sample Number	: 151 QC Co	de: Matr	ix: Water Tag	J ID: 6410-151
Project ID:	JG7CR01	Pro	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings -	Removal Action	sampling		
City:	Park Hills		State:	Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR		ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BK147 - 9301	Sink u	npursed		
		External Samp	ole Number: _		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:		:
Longitude:			End:	3733/17	<u>4:55</u>
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitainer	HNO3 to pH<2	180 Days	1 Metals in Wate	r by ICP/MS	
Sample Comme	ents:				
(N/A)					

ASR Number:	6410 Sample Number:	152	QC Cod	ie: Mat	rix: Water Tag	ID: 6410-152			
Project ID:		2000000			: Jason Gunter				
City:	Park Hills								
Program: Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07C	R Site OU: 01			
Location Desc:	BRMT-9301	Sink	Pur	ed .					
	1	Extern	al Samp	le Number:					
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)			
Latitude:		Sam	ple Coll	ection: Start:	_/_/	;			
Longitude:				End:	2/22/14	10:00			
Laboratory An	_		_						
Container 1 - 1 Liter Cubitaine	Preservative r HNO3 to pH<2		Days	Analysis 1 Metals in Wat	er by ICP/MS				
Sample Commo	ents:					,			

(N/A)

ASR Number:	6410 S a	ımple Number:	153	QC Co	de:	Matri	i x: Water Tag	ID: 6410-153
Project ID: Project Desc:		Mine Tailings - F	Remova		-	ger:	Jason Gunter	
-	Park Hills	_			• -	tate:	Missouri	
Program:	Superfun	d						
Site Name:		R MINE TAILING: TIAL ACT/SOURC	-		ERALS COR	P. <i>-</i>	Site ID: 07CF	R Site OU: 01
Location Desc:	EP.	MT-9301		Spig	at Unp	urgi	rd	
		I	Extern	al Samp	ole Numbe	:r: _		
Expected Conc	:	(or Circle One:	Low	Medium	High)		Date	Time(24 hr)
Latitude:			Sam	ple Coll	ection: St	art:	//	:
Longitude:					E	nd:	3/22/14	7 <u>5: 15</u>
Laboratory An	nalyses:			-				
Container	Pres	ervative	Holding	g Time	Analysis			
1 - 1 Liter Cubitaine	r HNO	3 to pH<2	180	Days	1 Metals in	Wate	r by ICP/MS	
Sample Commo	ents:							
(N/A)								

ASR Number:	6410 Sample Numbe	r: 154	QC Co	de: Matr	ix: Water Tag	ID: 6410-154
Project ID:	JG7CR01		Pro	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings -	Remova	al Action	sampling		
City:	Park Hills			State	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRAT-9301	Spigo	t Pury	ed		
		Extern	al Samp	ole Number:		
Expected Conc	(or Circle One	e: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	:
Longitude:				End:	2/22/14	<u> 10: 15</u>
Laboratory Ar	nalyses:	····				
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:	· - · · · · · · · · · · · · · · · · · ·				
(N/A)						

ASR Number:	6410 Sample Number:	155	QC Cod	le: Mat	rix: Water	Tag I	ID: 6410-155	
Project ID:	JG7CR01		Pro	ject Manage	r: Jason Gu	nter		
Project Desc:	Big River Mine Tailings - F	Removal	Action	sampling				
City:	Park Hills	rk Hills State: Missouri						
Program:	Superfund							
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID:	07CR	Site OU: 01	
Location Desc:	BRMT-9302	Sink	Ипри	rgid				
	f	Externa	ıl Samp	le Number:				
Expected Conc	: (or Circle One:	Low I	Medium	High)	Date		Time(24 hr)	
Latitude:		Samp	le Colle	ection: Start:	://_	_	:	
Longitude:				End	<u> </u>	4	10:45	
Laboratory An	alyses:		•					
Container	Preservative	Holding	Time	Analysis				
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wa	ter by ICP/MS			
Sample Comm	ents:							

(N/A)

ASR Number:	6410 Sample Num	ber: 156 QC C	ode: Mat	rix: Water Tag	ID: 6410-156
Project ID:	JG7CR01	Р	roject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailing	js - Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAIL RESIDENTIAL ACT/SO		NERALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT - 9302	Sink Pun	red		
		External Sar	nple Number:		
Expected Conc	(or Circle (One: Low Mediu	m High)	Date	Time(24 hr)
Latitude:		Sample Co	ollection: Start:		:
Longitude:			End:	2 122/14	10:50
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2	180 Days	1 Metals in Wat	er by ICP/MS	
Sample Comm	ents:				

(N/A)

ASR Number:	6410 Sample Number:	157 QC C	ode: Mat	rix: Water Tag	ID: 6410-157
Project ID:	JG7CR01	P	roject Manage	r: Jason Gunter	,,,,
Project Desc:	Big River Mine Tailings - I	Removal Actio	n sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		NERALS CORP	Site ID: 07CF	Site OU: 01
Location Desc:	BRMT-9302	Spigot u	Inpursed		
		External San	nple Number:		
Expected Conc	(or Circle One:	Low Mediu	m High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:	: _/_/_	:
Longitude:			End:	<u>1/32/14</u>	11:02
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	HNO3 to pH<2	180 Days	1 Metals in Wa	ter by ICP/MS	
Sample Commo	ents:				

(N/A)

ASR Number:	6410 Sample Number:	158	QC Co	de: Mat	rix: Water Tag	ID: 6410-158
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC	•		ERALS CORP	Site ID: 07CF	R Site OU: 01
Location Desc:	BRMT-4302	Spij	get Pu	insel		
	ı	Extern	al Samı	ole Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	:
Longitude:				End:	3/22/14	11:08
Laboratory An	nalyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	159	QC Co	de: Mat	rix: Water Tag	g ID: 6410-159
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - I	Remova	al Action	sampling		
City:	Park Hills			State	: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	•		ERALS CORP	Site ID: 07C	R Site OU: 01
Location Desc:	BRMT-9303	SinK	Unpur	sed		
	!	Extern	al Samp	ole Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:		:
Longitude:				End:	2/22/14	12:20
Laboratory An	alyses:			· · · ·		
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Water	er by ICP/MS	
Sample Commo	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	160	QC Co	de: Mat	rix: Water Tag	ID: 6410-160			
Project ID:	JG7CR01		Pro	ject Manager	: Jason Gunter				
Project Desc:	Big River Mine Tailings - F	Remova	l Action	sampling					
City:	Park Hills	rk Hills State: Missouri							
Program:	Superfund								
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CF	R Site OU: 01			
Location Desc:	BRMT-9303	Sink	Pary	ed					
	1	Externa	al Samp	ole Number:					
Expected Conc	(or Circle One:	Low I	Medium	High)	Date	Time(24 hr)			
Latitude:		Samp	ole Coll	ection: Start:	_/_/_	:			
Longitude:				End:	2/22/14	<u>12:25</u>			
Laboratory An	alyses:								
Container	Preservative	Holding	Time	Analysis					
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS				
Sample Commo	ents:								
(N/A)									

ASR Number:	6410 Sample Number	r: 161	QC Co	de: Matr	ix: Water Tag	ID: 6410-161
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings -	Remov		oject Manager: sampling	Jason Gunter	
City:	Park Hills			State:	Missouri	
_	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOUR	•		ERALS CORP	Site ID: 07CF	Site OU: 01
Location Desc:	BRMT-930:	3 5	Spigo	1+ - un p	urged	
		Extern	nal Samp	ole Number: _		
Expected Conc	(or Circle One	: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	iple Coll	ection: Start:		;
Longitude:				End:	3/22/14	1 <u>2:3</u> 5
Laboratory Ar	nalyses:		* ***			
Container	Preservative	Holdir	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180) Days	1 Metals in Wate	r by ICP/MS	
Sample Comm	ents:					
(N/A)						

ASR Number:	6410 Sample Number:	162 QC	Code: Mat	t rix: Water Tag	ID: 6410-162
Project ID:	JG7CR01		Project Manage	r: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Removal Act	ion sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	· · ·		Site ID: 07CF	Site OU: 01
Location Desc:	BRMT-9303	spigo	ot Purge	5	
	1	External Sa	mple Number:		
Expected Conc	(or Circle One:	Low Medi	um High)	Date	Time(24 hr)
Latitude:		Sample C	ollection: Start	·//	:
Longitude:			End	3/20/14	12:40
Laboratory An	alyses:				
Container	Preservative	Holding Tim	e Analysis		
1 - 1 Liter Cubitainer	HNO3 to pH<2	180 Day	s 1 Metals in Wa	ter by ICP/MS	
Sample Comme	ents:				
(N/A)					

ASR Number:	6410 Sample Number:	163 QC C	ode: Matr	ix: Water Tag	ID: 6410-163				
Project ID:	JG7CR01	Pr	oject Manager:	Jason Gunter					
Project Desc:	Big River Mine Tailings - F	Removal Actio	n sampling						
City:	Park Hills		State:	Missouri					
Program:	Superfund	perfund							
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC		IERALS CORP	Site ID: 07CF	Site OU: 01				
Location Desc:	BRMT-9307	Sink	un-purge	9					
	E	External Sam	ple Number:						
Expected Conc	(or Circle One:	Low Mediur	n High)	Date	Time(24 hr)				
Latitude:		Sample Co	llection: Start:		:				
Longitude:			End:	3/24/14	10:05				
Laboratory Ar	nalyses:								
Container	Preservative	Holding Time	Analysis						
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS					
Sample Comm	ents:	<u> </u>							
(N/A)									

ASR Number:	6410	Sample Numbe	r: 164	QC Cod	ie: Ma	trix: Water	Tag I	D: 6410-164
Project ID:	JG7CR	01		Pro	ject Manage	er: Jason Gui	nter	
Project Desc:	Big Riv	er Mine Tailings -	Remova	l Action	sampling			
City:	Park Hi	ills			Stat	t e: Missouri		
Program:	•							
Site Name:		VER MINE TAILIN ENTIAL ACT/SOUR			RALS CORP.	- Site ID:	07CR	Site OU: 01
Location Desc:	BRI	MT-9307	Sinf	, pur	ged			· · · · · · · · · · · · · · · · · · ·
			Externa	al Samp	le Number:			
Expected Conc	:	(or Circle One	e: Low	Medium	High)	Date		Time(24 hr)
Latitude:			Sam	ple Coll	ection: Star	t://_	_	;
Longitude:					End	1: <u>2</u> 24/11	4	<u>i0: i0</u>
Laboratory An	alyses	1						
Container	Pı	reservative	Holding	g Time	Analysis			
1 - 1 Liter Cubitaine	r HI	NO3 to pH<2	180	Days	1 Metals in W	ater by ICP/MS		
Sample Commo	ents:						-	

(N/A)

ASR Number:	6410 Sample Number:	165 QC C d	de: Matr	ix: Water Tag	ID: 6410-165
-	Big River Mine Tailings - F Park Hills			Jason Gunter Missouri	
_	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURC	•	ERALS CORP	Site ID: 07CF	Site OU: 01
Location Desc:	BRMT-9307	spigot (on-purge	9	
	!	External Sam	ple Number: _		
Expected Conc	(or Circle One:	Low Mediun	n High)	Date	Time(24 hr)
Latitude:		Sample Col	lection: Start:	//	:
Longitude:			End:	2/24/14	10:30
Laboratory An	alyses:	<u> </u>			
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wate	r by ICP/MS	
Sample Commo	ents:			· · · · · · · · · · · · · · · · · · ·	
(N/A)					

ASR Number:	6410 Sample Number:	166	QC Co	de: Matı	r ix: Water Tag	ID: 6410-166
City: Program:	Big River Mine Tailings - F Park Hills		al Action	sampling State	: Jason Gunter : Missouri	Site OU: 01
one warrer	RESIDENTIAL ACT/SOURCE				5110 151 07 01	
Location Desc:	BRMT-9307 5	spig	ot P	urged		
	ı	Extern	al Samp	ole Number:		
Expected Conc	: (or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	_/_/_	:_ _
Longitude:				End:	2/24/14	<u>10:27</u>
Laboratory An	nalyses:			• • • • • • • • • • • • • • • • • • • •	,	
Container 1 - 1 Liter Cubitaine	Preservative r HNO3 to pH<2		g Time Days	Analysis 1 Metals in Wate	er by ICP/MS	
Sample Commo	ents:			<u>, , , , , , , , , , , , , , , , , , , </u>		
(N/A)						

ASR Number:	6410 Sample Number:	167 Ç	C Code	e: Matr	ix: Water Tag	ID: 6410-167			
Project ID:	JG7CR01		Proj	ect Manager:	Jason Gunter				
Project Desc:	Big River Mine Tailings - R	Removal A	Action s	ampling					
City:	Park Hills			State:	Missouri				
Program:	Superfund	ıperfund							
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURC			RALS CORP	Site ID: 07CR	Site OU: 01			
Location Desc:	BRMT- 9310	spi	got	un-par	ged				
	E	External	Sampl	e Number: _					
Expected Conc	(or Circle One:	Low Me	edium	High)	Date	Time(24 hr)			
Latitude:		Sample	e Colle	ction: Start:	_/_/_	:			
Longitude:				End:	2/24/14	1 <u>2:2</u> 5			
Laboratory Ar	nalyses:			· · · · · · · · · · · · · · · · · · ·					
Container	Preservative	Holding 1	ime	Analysis					
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	r by ICP/MS				
Sample Comm	ents:								

Sample Collected By: DG/TT

(N/A)

ASR Number:	6410 San	nple Number:	168	QC Cod	ie: Ma	trix: Water	Tag I	D: 6410-168
Project ID: JG7CR01 Project Manager: Jason Gunter Project Desc: Big River Mine Tailings - Removal Action sampling City: Park Hills State: Missouri								
Program:	Superfund BIG RIVER	MINE TAILINGS AL ACT/SOURC			RALS CORP.	- Site ID:	07CR	Site OU: 01
Location Desc:	BRMT	-9310	spig	ot (Purged			
					le Number:			
Expected Conc	: ((or Circle One:	Low	Medium	High)	Date		Time(24 hr)
Latitude:			Samı	ole Coll	ection: Start	t://_	_	;
Longitude:					End	1: <u>3/34/1</u> 5	1	12:30
Laboratory An	nalyses:				· · · · · · · · · · · · · · · · · · ·			
Container 1 - 1 Liter Cubitaine	Preser r HNO3 t		Holding 180		Analysis 1 Metals in Wa	ater by ICP/MS		
Sample Commo	ents:			<u> </u>	<u>.</u>			
(N/A)								

ASR Number:	6410 Sampl	e Number:	169	QC Cod	ie: Mat	rix: Water	Tag ID: 6410-169		
Project ID: Project Desc:		Tailings - R	emova		ject Manager	: Jason Gunt	er		
-	Park Hills	rainigs is	CITIOVE	ai Action		: Missouri			
•	Superfund								
Site Name:	BIG RIVER MI RESIDENTIAL		•		RALS CORP	Site ID: 0	7CR Site OU: 01		
Location Desc:	BRMT-	9311 5	sin f	3 00	-purged				
		E	xtern	al Samp	le Number:				
Expected Conc	:: (or	Circle One:	Low	Medium	High)	Date	Time(24 hr)		
Latitude:	! <u></u>		Sam	ple Coll	ection: Start:		:		
Longitude:	·				End:	2 24/14	13:30		
Laboratory Ar	nalyses:								
Container	Preservat	ive	Holdin	g Time	Analysis				
1 - 1 Liter Cubitaine	er HNO3 to pl	H<2	180	Days	1 Metals in Wal	ter by ICP/MS			
Sample Comm	ents:			·					
(N/A)									

ASR Number:	6410 Sample Numb	er: 170	QC Co	de: Mat	rix: Water Tag	ID: 6410-170				
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings	- Remova			: Jason Gunter					
	Park Hills				: Missouri					
Program:	Superfund	uperfund								
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOL			RALS CORP	Site ID: 07CF	Site OU: 01				
Location Desc:	BRMT-9311	Sink	βοιί	jed						
		Externa	al Samp	ole Number:						
Expected Conc	: (or Circle Or	ne: Low	Medium	High)	Date	Time(24 hr)				
Latitude:		Sam	ple Coll	ection: Start:	//	:				
Longitude:				End:	2 24/14	13:35				
Laboratory Ar	nalyses:			· · · · · · · · · · · · · · · · · · ·		- · · · - · · · · · · · · · · · · · · ·				
Container	Preservative	Holding	g Time	Analysis						
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wat	er by ICP/MS					
Sample Comm	ents:									
(N/A)										

ASR Number:	6410 Sample Number:	171 QC Cod	ie: Matı	ix: Water Tag	ID: 6410-171
Project ID:	JG7CR01	Pro	ject Manager	: Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Removal Action	sampling		
City:	Park Hills		State	: Missouri	
Program:	Superfund				
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE		RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT-9311 5	pigot U	n-purger	-)	
	I	External Samp	ie Number:		
Expected Conc	(or Circle One:	Low Medium	High)	Date	Time(24 hr)
Latitude:		Sample Coll	ection: Start:	_/_/_	:
Longitude:			End:	a 124/14	13:45
Laboratory An	alyses:	 		· · · · · · · · · · · · · · · · · · ·	
Container	Preservative	Holding Time	Analysis		
1 - 1 Liter Cubitainer	r HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS	
Sample Comme	ents:				

Sample Collected By: DG/TT

(N/A)

ASR Number:	6410 S	ample Number	: 172	QC Co	de: Ma	atrix: Water Tag	ID: 6410-172		
Project ID:		r Mine Tailings -	Remova		-	er: Jason Gunter			
_	Park Hills	-		21 / 1021011	· -	te: Missouri			
Program:	•								
Site Name:		ER MINE TAILING ITIAL ACT/SOUR			ERALS CORP.	- Site ID: 07CR	Site OU: 01		
Location Desc:	BRM	I-9311 S	pigo	ot P	urged				
			Extern	al Samp	oie Number:				
Expected Conc	:	(or Circle One	: Low	Medium	High)	Date	Time(24 hr)		
Latitude:		- 	Sam	ple Coll	ection: Star	rt://	:		
Longitude:					End	d: a_124/14	13:40		
Laboratory An	alyses:				<u></u>				
Container	Pres	servative	Holdin	g Time	Analysis				
1 - 1 Liter Cubitaine	r HNC	3 to pH<2	180	Days	1 Metals in W	/ater by ICP/MS			
Sample Commo	ents:								
(N/A)									

ASR Number:	6410 Sample Number:	173	QC Cod	le: Matr	ix: Water Tag	ID: 6410-173
Project ID:	JG7CR01		Pro	ject Manager:	Jason Gunter	
Project Desc:	Big River Mine Tailings - F	Remova	I Action :	sampling		
City:	Park Hills			State:	Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT-9312 :	sinf	υn	-porged		
	ļ	Externa	al Samp	le Number: _		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Samı	ole Colle	ection: Start:	/ /	:
					2 124/14	14:25
Laboratory Ar	nalyses:		·	· · · · · · · · · · · · · · · · · · ·		
Container	Preservative	Holding	j Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					

Sample Collected By: DG/TT

(N/A)

ASR Number:	6410 Sample Number:	174	QC Cod	le: Matı	ix: Water Tag	ID: 6410-174
Project ID: Project Desc:	JG7CR01 Big River Mine Tailings - F	Remova		-	: Jason Gunter	
-	Park Hills				: Missouri	
Program:	Superfund					
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE			RALS CORP	Site ID: 07CR	Site OU: 01
Location Desc:	BRMT-9312	Sinf	; pur	ged		
	1	Extern	al Samp	le Number:		
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:		Sam	ple Coll	ection: Start:	//	_:
Longitude:				End:	a 124/14	14:30
Laboratory Ar	nalyses:					
Container	Preservative	Holdin	g Time	Analysis		
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180	Days	1 Metals in Wate	er by ICP/MS	
Sample Comm	ents:					· · · · · · · · · · · · · · · · · · ·
(N/A)						

ASR Number:	6410 Sample Number:	175 QC Coc	ie: Matr	ix: Water Tag	ID: 6410-175		
Project ID:	· · · · · · · · · · · · · · · · · · ·						
•	Big River Mine Tailings - Removal Action sampling						
•	Park Hills State: Missouri						
Program:	·						
Site Name:	BIG RIVER MINE TAILINGS RESIDENTIAL ACT/SOURCE		RALS CORP	Site ID: 07CR	Site OU: 01		
Location Desc:	BRMT-9312	spigot	na-bred	ed			
	1	External Samp	le Number:				
Expected Conc	: (or Circle One:	Low Medium	High)	Date	Time(24 hr)		
Latitude:							
Longitude:			End:	a a4/14	14:40		
Laboratory An	alyses:		· 	······································			
Container	Preservative	Holding Time	Analysis				
1 - 1 Liter Cubitaine	r HNO3 to pH<2	180 Days	1 Metals in Wate	er by ICP/MS			
Sample Commo	ents:						

(N/A)

ASR Number:	6410 Sample Number:	176	QC Cod	de: Matr	ix: Water Tag	ID: 6410-176	
Project ID:	JG7CR01	Project Manager: Jason Gunter					
Project Desc:	Big River Mine Tailings - Removal Action sampling						
City:	Park Hills State: Missouri						
Program:	Superfund						
Site Name:	BIG RIVER MINE TAILING RESIDENTIAL ACT/SOURCE	•		ERALS CORP	Site ID: 07C	R Site OU: 01	
Location Desc:	BRMT-9312	5ρ	igot-	purged			
	1	Exter	nal Samp	ole Number:			
Expected Conc	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)	
Latitude:		San	nple Coll	ection: Start:		:	
Longitude:				End:	2 24/14	14:45	
Laboratory An	alyses:						
Container	Preservative	Holdi	ng Time	Analysis			
1 - 1 Liter Cubitainer	HNO3 to pH<2	180) Days	1 Metals in Wate	er by ICP/MS		
Sample Comme	ents:						

Sample Collected By: DG/TT

(N/A)

ASR Number:	6410 S a	ample Number:	177	QC Cod	de: Ma	trix: Water	Tag ID: 6410-177
Project ID:	JG7CR01 Project Manager: Jason Gunter						
Project Desc:	Big River	Mine Tailings - F	Remov	al Action	sampling		
City:	Park Hills						
Program:	Superfun	·					
Site Name:		R MINE TAILING TIAL ACT/SOURC			RALS CORP.	- Site ID:	07CR Site OU: 01
Location Desc:	BRM	r-9281	hyc	cant	Purge	rd	
		!	Extern	al Samp	ole Number:		
Expected Conc	::	(or Circle One:	Low	Medium	High)	Date	Time(24 hr)
Latitude:			Sam	pie Coil	ection: Star	t://_	_ :
Longitude:					End	1: 2/19/14	14:50
Laboratory An	nalyses:						
Container	Pres	ervative	Holdin	ng Time	Analysis		
1 - 1 Liter Cubitaine	r HNO	3 to pH<2	180	Days	1 Metals in W	ater by ICP/MS	
Sample Commo	ents:						
(N/A)							